



Mojave Desert Air Quality Management District

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Visit our web site: <http://www.mdaqmd.ca.gov>

Brad Poiriez, Executive Director

March 13, 2018

Carol Sutkus
State of California
Environmental Protection Agency
Air Resources Board
P. O. Box 2815
Sacramento, California 95812

Project Title: Amendment of MDAQMD Rule 1157 – *Boilers and Process Heaters*

Dear Ms. Sutkus:

The Mojave Desert Air Quality Management District (MDAQMD) requests that the California Air Resources Board submit amended Rule 1157 – *Boilers and Process Heaters*, to the United States Environmental Protection Agency (USEPA) for inclusion in the State Implementation Plan (SIP).

The amendment of Rule 1157 – *Boilers and Process Heaters* was necessary to satisfy 42 U.S.C. §§7511a (FCAA §182) which requires that ozone non-attainment areas implement RACT for sources that are subject to CTGs and for major sources of ozone precursors. Rule 1157 was most recently amended on May 19, 1997 and submitted as a SIP revision. This current amendment will supersede the prior submittal. A complete SIP discussion is contained in the accompanying Staff Report §(VI)(E). This rule must be included in the SIP as it provides applicable definitions for other SIP rules.

The District requests CARB submit to USEPA the proposed amendments to Rule 1157 to replace the SIP versions in effect in the San Bernardino County portion of the MDAB and the Blythe/Palo Verde Valley portion of Riverside County. The District also requests removal of all prior versions of Rule 1157 from the Blythe/Palo Verde Valley portion of the MDAQMD.

If you have any questions regarding this submittal, please contact me at (760) 245-1661, extension 6726, or Michelle Zumwalt at extension 5756. Please note that all documents required for a complete submission were sent electronically on March 13, 2018.

Sincerely,

A handwritten signature in black ink, appearing to read "Alan J. De Salvio".

Alan J. De Salvio

Deputy Director – Mojave Desert Operations

AJD/mz

CARB SIP Submittal Request MD Rule 1157 01222018

CALIFORNIA AIR RESOURCES BOARD

SIP COMPLETENESS CHECKLIST
(Electronic Format)

*** TO BE COMPLETED BY DISTRICT AND RETURNED TO ARB ***

All rules submitted to the EPA as State Implementation Plan (SIP) revisions must be supported by certain information and documentation for the rule packages to be deemed complete for review by the EPA. Rules will not be evaluated for approvability by the EPA unless the submittal packages are complete. To assist you in determining that all necessary materials are included in rules packages sent to the ARB for submittal to the EPA, please fill out the following form and include it with the rule package you send ARB. See the ARB's Guidelines on the Implementation of the 40 CFR 51, Appendix V, for a more detailed explanation than is provided here. Adopted rules and rule amendments should be checked against U.S. EPA's Guidance Document for Correcting Common VOC & Other Rule Deficiencies (Little Blue Book, August 21, 2001) to ensure that they contain no elements which will result in disapproval by EPA.

District: Mojave Desert Air Quality Management District

Rule No: 1157

Rule Title: Boilers and Process Heaters

Date Adopted or Amended: 01/22/2018

ADMINISTRATIVE MATERIALS

Note: All documents should be in electronic format. Items that have signatures, initials, or stamps may be scanned.

<u>Attached</u>	<u>Not Attached</u>	<u>N/A</u>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>COMPLETE COPY OF THE RULE:</u> Provide an unmarked copy of the entire rule as adopted or amended by your District Board.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>UNDERLINE AND STRIKEOUT COPY OF THE RULE:</u> If an amended rule, provide a complete copy of the rule indicating in underline and strikeout format all language which has been added, deleted, or changed since the rule was last adopted or amended. (See Staff Report Appendix A)
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<u>COMPLETE COPY OF THE REFERENCED RULE(S):</u> For any rule which includes language specifically referencing another rule, a copy of that other rule must also be submitted, unless it has already been submitted to EPA as part of a previous SIP submittal.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>PUBLIC NOTICE EVIDENCE:</u> Include a copy of the local newspaper clipping certification(s), stating the date of publication, which must be at least 30 days before the hearing. As an alternative, include a copy of the actual published notice of the public hearing as it appeared in the local newspaper(s). In this case, however, enough of the newspaper page must be included to show the date of publication. The notice must specifically identify by title and number each rule adopted or amended. (See Staff Report Appendix B)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>RESOLUTION/MINUTE ORDER:</u> Provide the Board Clerk certified resolution or minute order. This document must include certification that the hearing was held in accordance with the information in the public notice. It must also list the rules that were adopted or amended, the date of the public hearing, and a statement of compliance with California Health and Safety Code Sections 40725-40728 (Administrative Procedures Act).
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>PUBLIC COMMENTS AND RESPONSES:</u> Submit copies of written public comments made during the notice period and at the public hearing. Also submit any written responses prepared by the District staff or presented to the District Board at the public hearing. A summary of the public comments and responses is adequate. If there were no comments made during the notice period or at the hearing, please indicate N/A to the left. (See Staff Report Appendix C)

SIP COMPLETENESS CHECKLIST
(Electronic Format)

*** TO BE COMPLETED BY DISTRICT AND RETURNED TO ARB ***

- | | | | |
|-------------------------------------|--------------------------|-------------------------------------|--|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <u>RULE EVALUATION FORM:</u> See instructions for completing the Rule Evaluation Form and the accompanying sample form. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <u>NON-EPA TEST METHODS:</u> Attach all test methods that are referenced in your rule that do not appear in 40 CFR 51, 60, 61, 63, or have not been previously submitted to EPA. EPA methods used in other media such as SW846 for solid waste are not automatically approved for air pollution applications. Submittal of test methods that are not EPA-approved should include the information and follow the procedure described in Region 9's "Test Method Review & Evaluation Process." |
| <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <u>MODELING SUPPORT:</u> Provide if appropriate. In general, modeling support is not required for VOC and NOx rules to determine their impacts on ozone levels. Modeling is required where a rule is a relaxation that affects large sources (≥ 100 TPY) in an attainment area for SO ₂ , directly emitted PM ₁₀ , CO, or NO _x (for NO ₂ purposes). In cases where EPA is concerned with the impact on air quality of rule revisions which relax limits or cause a shift in emission patterns in a nonattainment area, a reference back to the approved SIP will be sufficient provided the approved SIP accounts for the relaxation and provided the approved SIP used the current EPA modeling guidelines. If current EPA modeling guidelines were not used, then new modeling may be required. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <u>ECONOMIC AND TECHNICAL JUSTIFICATION FOR DEVIATIONS FROM EPA POLICIES:</u> The District staff report or other information included with the submittal should discuss all potential relaxations or deviations from RACT, RACM, BACT, BACM, enforceability, attainment, RFP, or other relevant EPA requirements. This includes, for example, demonstrating that exemptions or emission limits less stringent than the presumptive RACT (e.g., a CTG) meet EPA's 5 percent policy, and demonstrating that all source categories exempted from a RACM/BACM rule are de minimus according to EPA's RACM/BACM policy. (See Staff Report) |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <u>ADDITIONAL MATERIALS:</u> Provide District staff reports and any other supporting information concerning development of the rule or rule changes. This information should explain the basis for all limits and thresholds contained in the rule. |

APCD/AQMD RULE EVALUATION FORM – Page 1
(Electronic Format)**I. GENERAL INFORMATION**District: Mojave Desert Air Quality Management DistrictRule No(s): 1157 Date adopted/Amended/Rescinded: January 22, 2018Rule Title(s): Boilers and Process HeatersDate Submitted to ARB: March 13, 2018If an Amended Rule, Date Last Amended (or Adopted): May 19, 1997Is the Rule Intended to be Sent to the U.S. EPA as a SIP Revision? ☒ Yes ☐ No (If No, do not complete remainder of form)District Contact: Michelle Zumwalt Phone Number: (760)245-1661 x5756 E-mail Address: mzumwalt@mdaqmd.ca.govNarrative Summary of New Rule or Rule Changes: ☐ New Rule ☒ Amended RuleThe amendments to Rule 1157 satisfy 42 U.S.C. §§7511a (FCAA §182) which requires that ozone non-attainment areas implement RACT for sources that are subject to CTGs and for major sources of ozone precursors.The amendments to Rule 1157 address the RACT SIP Analysis commitments. All of the amendments update rule definitions and improve rule clarity. Specifically the amendments in Rule 1157 strengthen RACT NOx limits from 70 to 30 ppmv for gaseous fuel, and adds a 40 ppmv limit for liquid fuels. For BARCT 30 ppmv is maintained for gaseous fuel, and 40 ppmv remains applicable to liquid fuels. Solid fuels are no longer used in the District and thus all reference to solid fuels have been removed from the rule. The SEGS exemption has been strengthened from 80 ppmv to 70 ppmv when operating at more than 40 percent (40%) of rated heat input or when the permit unit is located at SEGS III, IV, VII or IX. Exemptions were added for clarity regarding units subject to District Rules 1158 or 1161, and units located outside of the FONA (Federal Ozone Nonattainment Area).Pollutant(s) Regulated by the Rule (Check): ☐ ROG ☒ (NOx) ☐ SO2
☒ (CO) ☐ PM ☐ TAC (name): _____**II. EFFECT ON EMISSIONS***Complete this section ONLY for rules that, when implemented, will result in quantifiable changes in emissions. Attach reference(s) for emission factor(s) and other information. Attach calculation sheet showing how the emission information provided below was determined.*Net Effect on Emissions: ☐ Increase ☐ Decrease ☒ N/AEmission Reduction Commitment in SIP for this Source Category: N/AInventory Year Used to Calculate Changes in Emissions: N/A Area Affected: N/AFuture Year Control Profile Estimate (Provide information on as many years as possible):
N/A

APCD/AQMD RULE EVALUATION FORM - Page 2
(Electronic Format)

Baseline Inventory in the SIP for the Control Measure: N/A

Emissions Reduction Commitment in the SIP for the Control Measure: N/A

Revised Baseline Inventory (if any): N/A

Revised Emission Reduction Estimate (if developed): N/A

Note that the district's input to the Rule Evaluation Form will not be used as input to the ARB's emission forecasting and planning.

III. SOURCES/ATTAINMENT STATUS

District is: ☐ Attainment ☐ Nonattainment ☒ Split

Approximate Total Number of Small (<100 TPY) Sources Affected by this Amendment: ≈ 50

Percent in Nonattainment Area: 100%

Number of Large (\geq 100 TPY) Sources Controlled: 0 Percent in Nonattainment Area: 0%

Name(s) and Location(s) (city and county) of Large (\geq 100 TPY) Sources Controlled by Rule (Attach additional sheets as necessary): N/A

IV. EMISSION REDUCTION TECHNOLOGY

Does the Rule Include Emission Limits that are Continuous? ☐ Yes ☒ No

If Yes, Those Limits are in Section(s) N/A of the Rule.

Other Methods in the Rule for Achieving Emission Reductions are: Emissions control plan, operational requirements, tuning requirements and emissions compliance testing.

V. OTHER REQUIREMENTS

The Rule Contains:

Emission Limits in Section(s): C Work Practice Standards in Section(s): C

Recordkeeping Requirements in Section(s): E Reporting Requirements in Section(s): E

APCD/AQMD RULE EVALUATION FORM - Page 3
(Electronic Format)

VI. IMPACT ON AIR QUALITY PLAN

☒ No Impact ☐ Impacts RFP ☐ Impacts attainment

Discussion: All of the amendments update rule definitions and improve rule clarity. Specifically the amendments in Rule 1157 strengthen RACT NOx limits from 70 to 30 ppmv for gaseous fuel, and adds a 40 ppmv limit for liquid fuels. For BARCT 30 ppmv is maintained for gaseous fuel, and 40 ppmv remains applicable to liquid fuels. Solid fuels are no longer used in the District and thus all reference to solid fuels have been removed from the rule. The SEGS exemption has been strengthened from 80 ppmv to 70 ppmv when operating at more than 40 percent (40%) of rated heat input or when the permit unit is located at SEGS III, IV, VII or IX. Exemptions were added for clarity regarding units subject to District Rules 1158 or 1161, and units located outside of the FONA (Federal Ozone Nonattainment Area).

The rule amendments are more stringent than the previous rule version. There is no potential that the amendments might cause the release of additional air contaminants or create any adverse environmental impacts.

**MINUTES OF THE GOVERNING BOARD
OF THE MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT
VICTORVILLE, CALIFORNIA**

AGENDA ITEM #22

PAGE 1

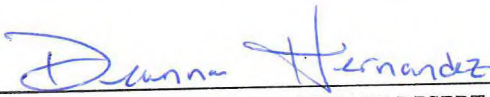
DATE: January 22, 2018

RECOMMENDATION: Conduct a public hearing to consider the amendment of Rule 1157 – *Boilers and Process Heaters*. a. Open public hearing; b. Receive staff report; c. Receive public testimony; d. Close public hearing; e. Make a determination that the California Environmental Quality Act (CEQA) Categorical Exemption applies; f. Waive reading of Resolution; g. Adopt Resolution making appropriate findings, certifying the Notice of Exemption, amending Rules 461, 462 and 463, and directing staff actions.

SUMMARY: Rule 1157 is proposed for amendment to satisfy 42 U.S.C. §7511a (Federal Clean Air Act (FCAA) §182) which requires that ozone non-attainment areas implement Reasonably Available Control Technology (RACT) for sources that are subject to Control Techniques Guidelines (CTG) and for major sources of ozone precursors. Additionally, the District is amending this rule to satisfy a prior commitment to implement the provisions of H&S Code §39614(d) (expired by its own terms on January 1, 2011) which required the adoption of readily available, feasible and cost-effective control measures for Particulate Matter from a list of potential local control measures promulgated by the California Air Resources Board (CARB)

CONFLICT OF INTEREST: None

BACKGROUND: The FCAA requires areas designated non-attainment and classified moderate or above to implement Reasonably Available Control Technology (RACT) for sources subject to Control Techniques Guidelines (CTG) documents issued by United States Environmental Protection Agency (USEPA) for “major sources” of volatile organic compounds (VOCs) and oxides of nitrogen (NO_x) which are ozone precursors. The District adopted the *2015 8-Hour Reasonably Available Control Technology – State Implementation Plan Analysis (RACT SIP Analysis)* in February, 2015 which committed to amending Rule 1157 – *Boilers and Process Heaters* to current Federal RACT.

I, 
**CUSTODIAN OF RECORDS OF MOJAVE DESERT AIR
QUALITY MANAGEMENT DISTRICT, HEREBY CERTIFY
THE FOREGOING TO BE A FULL, TRUE AND CORRECT
COPY OF THE RECORD OF THE ACTION AS THE SAME
APPEARS IN THE OFFICIAL MINUTES OF SAID
GOVERNING BOARD MEETING**

MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT.

**MINUTES OF THE GOVERNING BOARD
OF THE MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT
VICTORVILLE, CALIFORNIA**

AGENDA ITEM #22

PAGE 2

District Rule 1157- *Boilers and Process Heaters*, was adopted on October 26, 1994 and last amended on May 19, 1997. The rule was approved as RACT into the SIP in 1999. (64 FR 19277, 04/20/1999). Previous versions of this rule addressed requirements outlined in the applicable CTG's published in the 1990s: *NOx Emission from Process Heaters* (EPA-453/R-93-034 September 1993), *NOx Emissions from Industrial, Commercial & Institutional Boilers* (EPA-453/R-94-022 March 1994) and Alternative Control Techniques Document, *NOx Emissions from Utility Boilers* (EPA-453/R-94-023 March 1994).

The proposed amendments are based on the Control Technology Guidelines (CTGs), and various district rules deemed as fulfilling Reasonably Available Control Technology (RACT) requirements, including but not limited to: Imperial County Air Pollution Control District (ICAPCD) Rule 101 – *Definitions* (82 FR 26594, 06/08/2017), and Rule 400.2 – *Boilers, Process Heaters and Steam Generators* (78 FR 896, 01/07/2013); Sacramento Metro Air Quality Management District (SMAQMD) Rule 411 – *NOx from Boilers, Process Heaters and Steam Generators* (74 FR 20880, 05/06/2009); San Joaquin Air Pollution Control District (SJAPCD) Rule 4352 – *Solid Fuel Fired Boilers, Steam Generators and Process Heaters* (77 FR 66548, 11/06/2012); and South Coast Air Quality Management District (SCAQMD) Rule 1146 *Emission of Oxides of Nitrogen from industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters* (79 FR 57442, 11/01/2013).

The proposed amendments to Rule 1157 address the *RACT SIP Analysis* commitments. All of the proposed amendments update rule definitions and improve rule clarity. Specifically the proposed amendments in Rule 1157 strengthen RACT NOx limits from 70 to 30 ppmv for gaseous fuel, and adds a 40 ppmv limit for liquid fuels. For BARCT 30 ppmv is maintained for gaseous fuel, and 40 ppmv remains applicable to liquid fuels. Solid fuels are no longer used in the District and thus all reference to solid fuels have been removed from the rule. The SEGS exemption has been strengthened from 80 ppmv to 70 ppmv when operating at more than 40 percent (40%) of rated heat input or when the permit unit is located at SEGS III, IV, VII or IX. Exemptions were added for clarity regarding units subject to District Rules 1158 or 1161, and units located outside of the FONA (Federal Ozone Nonattainment Area).

A Notice of Exemption, Categorical Exemption (Class8; 14 Cal. Code Reg. §15308) will be prepared by the MDAQMD for the amendments of Rule 1157 pursuant to the requirements of CEQA.

REASON FOR RECOMMENDATION: Health & Safety Code §§40702 and 40703 require the Governing Board to hold a public hearing before adopting rules and regulation. Also, 42 U.S.C. §7410(l) (FCAA §110(l)) requires that all SIP revisions be adopted after public notice and hearing.

**MINUTES OF THE GOVERNING BOARD
OF THE MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT
VICTORVILLE, CALIFORNIA**

AGENDA ITEM #22

PAGE 3

REVIEW BY OTHERS: This item was reviewed by Karen Nowak, Deputy District Counsel as to legal form and by Alan De Salvio, Deputy Director – Mojave Desert Operations on or about January 8, 2018.

FINANCIAL DATA: No increase in appropriation is anticipated.

PRESENTER: Alan De Salvio, Deputy Director – Mojave Desert Operations

ACTION OF THE GOVERNING BOARD

ADOPTED

Upon Motion by **ROBERT LEONE**, Seconded by **ED CAMARGO**, as approved by the following roll call vote:

Ayes: **11** **CAMARGO, COLE, COX, DECONINCK, HERNANDEZ, LEONE, LOVINGOOD, PEREZ, RAMOS, RIORDAN, SWANSON**

Noes:

Absent: **2** **STANTON, WILLIAMS**

Abstain:

Vacant:

DEANNA HERNANDEZ, SENIOR EXECUTIVE ANALYST

BY  _____

Dated: JANUARY 22, 2018

Ref. Resolution 18-06, “A RESOLUTION OF THE GOVERNING BOARD OF THE MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT MAKING FINDINGS, CERTIFYING THE NOTICE OF EXEMPTION, AMENDING RULE 1157 – *BOILERS AND PROCESS HEATERS* AND DIRECTING STAFF ACTIONS.”

RESOLUTION 18-06

A RESOLUTION OF THE GOVERNING BOARD OF THE MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT MAKING FINDINGS, CERTIFYING THE NOTICE OF EXEMPTION, AMENDING RULE 1157 – BOILERS AND PROCESS HEATERS, AND DIRECTING STAFF ACTIONS.

On January 22, 2018, on motion by Member **ROBERT LEONE**, seconded by Member **ED CAMARGO**, and carried, the following resolution is adopted:

WHEREAS, the Mojave Desert Air Quality Management District (MDAQMD) has authority pursuant to California Health and Safety Code (H & S Code) §§40702, 40725-40728 to adopt, amend or repeal rules and regulations; and

WHEREAS the FCAA requires areas designated non-attainment and classified moderate or above to implement Reasonably Available Control Technology (RACT) for sources subject to Control Techniques Guidelines (CTG) documents issued by United States Environmental Protection Agency (USEPA) for “major sources” of volatile organic compounds (VOCs) and oxides of nitrogen (NOX) which are ozone precursors; and

WHEREAS, The District adopted the 2015 8-Hour Reasonably Available Control Technology – State Implementation Plan Analysis (RACT SIP Analysis) in February, 2015 which committed to amending Rule 1157 – Boilers and Process Heaters to current Federal RACT; and

WHEREAS, District Rule 1157- Boilers and Process Heaters, was adopted on October 26, 1994 and last amended on May 19, 1997; and

WHEREAS, the rule was approved as RACT into the SIP in 1999. (64 FR 19277, 04/20/1999). Previous versions of this rule addressed requirements outlined in the applicable CTG’s published in the 1990s, specifically NOx Emission from Process Heaters (EPA-453/R-93-034 September 1993), NOx Emissions from Industrial, Commercial & Institutional Boilers (EPA-453/R-94-022 March 1994) and Alternative Control Techniques Document, NOx Emissions from Utility Boilers (EPA-453/R-94-023 March 1994); and

WHEREAS, the proposed amendments are based on the Control Technology Guidelines (CTGs), and various district rules deemed as fulfilling Reasonably Available Control Technology (RACT) requirements, including but not limited to: Imperial County Air Pollution Control District (ICAPCD) Rule 101 – Definitions (82 FR 26594, 06/08/2017), and Rule 400.2 – Boilers, Process Heaters and Steam

RESOLUTION 18-06

Generators (78 FR 896, 01/07/2013); Sacramento Metro Air Quality Management District (SMAQMD) Rule 411 – NO_x from Boilers, Process Heaters and Steam Generators (74 FR 20880, 05/06/2009); San Joaquin Air Pollution Control District (SJAPCD) Rule 4352 – Solid Fuel Fired Boilers, Steam Generators and Process Heaters (77 FR 66548, 11/06/2012); and South Coast Air Quality Management District (SCAQMD) Rule 1146 Emission of Oxides of Nitrogen from industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters (79 FR 57442, 11/01/2013); and

WHEREAS, the proposed amendments to Rule 1157 address the RACT SIP Analysis commitments; and

WHEREAS, all of the proposed amendments update rule definitions and improve rule clarity. Specifically the proposed amendments in Rule 1157 strengthen RACT NO_x limits from 70 to 30 ppmv for gaseous fuel, and adds a 40 ppmv limit for liquid fuels; and

WHEREAS, for BARCT 30 ppmv is maintained for gaseous fuel, and 40 ppmv remains applicable to liquid fuels; and

WHEREAS, solid fuels are no longer used in the District and thus all reference to solid fuels have been removed from the rule; and

WHEREAS, the SEGS exemption has been strengthened from 80 ppmv to 70 ppmv when operating at more than 40 percent (40%) of rated heat input or when the permit unit is located at SEGS III, IV, VII or IX; and

WHEREAS, exemptions were added for clarity regarding units subject to District Rules 1158 or 1161, and units located outside of the FONA (Federal Ozone Nonattainment Area); and

WHEREAS, All of the proposed amendments update rule definitions, rule clarity; and

WHEREAS, the proposed amendments to the Rule are necessary to satisfy 42 U.S.C. §§7511a (FCAA §182) which requires that ozone non-attainment areas implement RACT for sources that are subject to CTGs and for major sources of ozone precursors; and

WHEREAS, the MDAQMD has the authority pursuant to H & S Code §40702 to amend rules and regulations; and

WHEREAS, the proposed amendments are clear in that the meaning can be easily understood by the persons impacted by the Rule; and

RESOLUTION 18-06

1 **WHEREAS**, the proposed amendments are in harmony with, and not in conflict with, or
2 contradictory to existing statutes, court decisions, or State or federal regulations because The proposed
3 amendments to Rule 1157 is in conformance with the applicable CTG's; and

4 **WHEREAS**, the proposed amendments do not impose the same requirements as any existing
5 State or federal regulation because CTG's and RACT are not directly enforceable; therefore this rule is
6 necessary to enforce standards and is non-duplicative; and

7 **WHEREAS**, the proposed amendments are needed in order to impose RACT for sources that are
8 subject to CTGs and for major sources of ozone precursors; and

9 **WHEREAS**, a public hearing has been properly noticed and conducted, pursuant to H & S Code
10 §40725, concerning the proposed amendments to Rule 1157; and

11 **WHEREAS**, a Notice of Exemption, a Categorical Exemption (Class 8, 14 CCR §15308) for the
12 proposed amendments to Rule 1157, completed in compliance with the California Environmental Quality
13 Act (CEQA), has been presented to the MDAQMD Board; each member having reviewed, considered and
14 approved the information contained therein prior to acting on the proposed amendments to Rule 1157, and
15 the MDAQMD Board having determined that the proposed amendments will not have any potential for
16 resulting in any adverse impact upon the environment; and

17 **WHEREAS**, the Board has considered the evidence presented at the public hearing; and

18 **NOW, THEREFORE, BE IT RESOLVED**, that the Governing Board of the MDAQMD finds
19 that the proposed amendments to Rule 1157 – *Boilers and Process Heaters* is necessary, authorized, clear,
20 consistent, non-duplicative and properly referenced; and

21 **BE IT FURTHER RESOLVED**, that the Governing Board of the MDAQMD hereby makes a
22 finding that the Class 8 Categorical Exemption (14 CCR §15308) applies and certifies the Notice of
23 Exemption for the proposed amendment to Rule 1157.

24 **BE IT FURTHER RESOLVED**, that the Board of the MDAQMD does hereby adopt, pursuant
25 to the authority granted by law, the proposed amendments to Rule 1157, as set forth in the attachments to
26 this resolution and incorporated herein by this reference; and

RESOLUTION 18-06

BE IT FURTHER RESOLVED, that this resolution shall take effect immediately upon adoption, that the Clerk of the Board is directed to file the Notice of Exemption in compliance with the provisions of CEQA.

PASSED, APPROVED AND ADOPTED by the Governing Board of the Mojave Desert Air Quality Management District by the following vote:

AYES: 11 MEMBER: CAMARGO, COLE, COX, DECONINCK, HERNANDEZ, LEONE, LOVINGOOD, PEREZ, RAMOS, RIORDAN, SWANSON

NOES: MEMBER:

ABSENT: 2 MEMBER: STANTON, WILLIAMS

ABSTAIN: MEMBER:

STATE OF CALIFORNIA)
COUNTY OF SAN BERNARDINO) SS:

I, Deanna Hernandez, Senior Executive Analyst of the Governing Board of the Mojave Desert Air Quality Management District, hereby certify the foregoing to be a full, true and correct copy of the record of the action as the same appears in the Official Minutes of said Governing Board at its meeting of January 22, 2018.



Senior Executive Analyst,
Mojave Desert Air Quality Management District.

RULE 1157

Boilers and Process Heaters

(A) General

(1) Purpose:

- (a) To limit Oxides of Nitrogen (NO_x) and Carbon Monoxide (CO) emissions from industrial, institutional, and commercial Boilers, Steam Generators, and Process Heaters.

(2) Applicability:

- (a) This rule applies to new and existing Boilers, Steam Generators, and Process Heaters located within the Federal Ozone Non-Attainment Area with Rated Heat Inputs of greater than or equal to 5 million Btu per hour (MMBtu/hr) which are used in all industrial, institutional, and commercial operations, including permit units used by Independent Power Producer or a Cogeneration Facility.
 - (b) This rule does not apply to permit units whose sole purpose is the production of steam for electrical power generating equipment when the permit unit is located at a facility directly regulated by a Public Utilities Commission.
- (3) Compliance with this rule does not exempt a person from complying with any other applicable State, federal or local law, statute, code, ordinance, rule, or regulation.

(B) Definitions

- (1) The definitions contained in District Rule 102 – *Definition of Terms* shall apply unless the term is otherwise defined herein:
 - (a) "Annual Heat Input" - The total heat input of fuels, in Btu, burned by a permit unit in a calendar year, as determined from the higher heating value and cumulative annual usage of each fuel.
 - (b) "Cogeneration Facility" – A facility which produces:
 - (i) electric energy; and
 - (ii) steam or forms of useful energy (such as heat) which are used for industrial or commercial heating or cooling purposes.

- (c) "Emissions Control Plan" - A document which outlines how an existing facility will comply with the requirements of this rule. The plan shall contain the following:
 - (i) a list of all permit units with their Rated Heat Inputs and estimated Annual Heat Inputs; and
 - (ii) for permit units subject to subsection (C)(3)(a) or (C)(4)(a), for each permit unit listed, the selected method of achieving the applicable standard or standards of subsection (C)(3)(a) or (C)(4)(a); and
 - (iii) for permit units subject to subsection (C)(3)(b) or (C)(4)(b), for each permit unit listed, a selection of one of the four options specified in subsection (C)(3)(b) or (C)(4)(b) to achieve compliance with this rule.
- (d) "Gaseous Fuel" - Natural gas, digester gas, landfill gas, methane, ethane, propane, butane, or any gas stored as a liquid at high pressure such as liquefied petroleum gas.
- (e) "High Annual Heat Input Permit Unit" - A permit unit with an annual heat input greater than or equal to 50,000 million Btu (MMBtu).
- (f) "Independent Power Producer" - A power plant which is not directly regulated by a Public Utilities Commission, which provides power to an electric utility rather than directly to rate-payers, and which is a Qualifying Small Power Production Facility per Public Utility Regulatory Policies Act regulations (18 CFR Ch.1, Subpart B).
- (g) "Liquid Fuel" - Any fuel which is a liquid at standard conditions including but not limited to distillate oils, kerosene and jet fuel. Liquefied Gaseous Fuels are not Liquid Fuels.
- (h) "Low Annual Heat Input Permit Unit" - A permit unit with an annual heat input less than 50,000 million Btu (MMBtu).
- (i) "NO_x Emissions" (NO_x) - The sum of any oxides of nitrogen which can be measured in the flue gas.
- (j) "Process Heater" - Any combustion equipment fired with any fuel, which transfers heat from combustion gases to water or process streams. Process Heaters do not include any dryers in which the material being dried is in direct contact with the products of combustion, such as: cement or lime kilns, glass melting furnaces, or smelters.
- (k) "Solar Power Production Facility" - An independent power producer which is a Solar Thermal Powerplant in which 75 percent (75%) or more of the total energy output is from solar energy and the use of backup fuels, such as oil, natural gas, and coal, does not, in the aggregate, exceed 25 percent (25%) of the total energy input of the facility during any calendar year period per Public Resources Code §25140.

(C) Requirements

- (1) RACT standards shall apply to all permit units, unless BARCT standards are applicable to the particular existing permit unit. BARCT standards shall apply to any existing permit units currently permitted to emit more than five tons per day or more than 250 tons per year of NO_x.
- (2) An Owner/Operator of any permit unit(s) subject to subsection (C)(3)(a) or (C)(4)(a) below shall have the option of complying with either the ppmv or pounds per million Btu (lbs/MMBtu) NO_x emission limits.
- (3) RACT Standards:
 - (a) High Annual Heat Input permit units, shall not emit:
 - (i) carbon monoxide in excess of 400 ppmv; and
 - (ii) NO_x in excess of 30 ppmv, and/or 0.036 lbs/MMBtu of heat input, when operated on Gaseous Fuel; and
 - (iii) NO_x in excess of 40 ppmv, and/or 0.052 lbs/MMBtu of heat input, when operated on Liquid Fuels; and
 - (iv) NO_x in excess of the heat-input weighted average of the limits specified in (C)(3)(a)(ii) and (C)(3)(a)(iii), above, when operated on combinations of Gaseous and/or Liquid Fuels.

Sample calculation:

$$\text{Emission Limit} = \frac{(40 \text{ ppmv} * x) + (70 \text{ ppmv} * y)}{x + y}$$

Where:

x	=	Annual Heat Input from Gaseous Fuel
y	=	Annual Heat Input from Liquid Fuel

- (b) Low Annual Heat Input permit units shall:
 - (i) be operated in a manner that maintains stack-gas oxygen (O₂) concentrations at less than or equal to 3.0 percent by volume on a dry basis; or
 - (ii) be operated with a stack-gas oxygen trim system set at 3.00±0.15 percent oxygen by volume on a dry basis; or
 - (iii) be tuned at least annually in accordance with the procedure described in Section (I), a modification of the tuning procedure described in Section (I) as approved by the APCO, CARB and USEPA, or the permit unit manufacturer's specified tune-up procedure; or
 - (iv) be operated in compliance with the applicable emission levels specified in subsection (C)(3)(a).

(4) BARCT Standards:

- (a) High Annual Heat Input permit units, as defined in Section (B), shall not emit:
- (i) carbon monoxide in excess of 400 ppmv; and
 - (ii) NOx in excess of 30 ppmv, and/or 0.036 lbs/MMBtu of heat input, when operated on Gaseous Fuel; and
 - (iii) NOx in excess of 40 ppmv, and/or 0.052 lbs/MMBtu of heat input, when operated on Liquid fuels ; and
 - (iv) NOx in excess of the heat-input weighted average of the limits specified in (C)(4)(a)(ii) and (C)(4)(a)(iii), above, when operated on combinations of Gaseous and/or Liquid fuels.

Sample calculation:

$$\text{Emission Limit} = \frac{(30 \text{ ppmv} * x) + (40 \text{ ppmv} * y)}{x + y}$$

Where:

x	=	Annual Heat Input from Gaseous Fuel
y	=	Annual Heat Input from Liquid Fuel

- (b) Low Annual Heat Input permit units, as defined in Section (B), shall:
- (i) be operated in a manner that maintains stack-gas oxygen concentration at less than or equal to 3.0 percent by volume on a dry basis; or
 - (ii) be operated with a stack-gas oxygen trim system set at 3.00±0.15 percent oxygen by volume on a dry basis; or
 - (iii) be tuned at least annually in accordance with the procedure described in Section (I), a modification of the tuning procedure described in Section (I) as approved by the APCO, CARB and USEPA, or the permit unit manufacturer's specified tune-up procedure; or
 - (iv) be operated in compliance with the applicable emission levels specified in subsection (C)(4)(a).

(5) General Equipment Requirements:

- (a) Owner/Operators of permit units which simultaneously fire combinations of different fuels, and are subject to the requirements of subsection (C)(3)(a) or (C)(4)(a), shall:
- (i) install mass flow rate meters in each fuel line; or

- (ii) install volumetric flow rate meters in conjunction with temperature and pressure probes in each fuel line; or
 - (iii) maintain a fuel log.
- (b) Owner/Operators of permit units which employ flue-gas NO_x reduction technology, and are subject to the requirements of subsection (C)(3)(a) or (C)(4)(a), shall:
 - (i) install meters as applicable to allow instantaneous monitoring of the operational characteristics of the NO_x reduction equipment; or
 - (ii) maintain a log of NO_x reduction equipment operational characteristics.
- (c) Owner/Operators of permit units which are subject to (C)(3)(b) or (C)(4)(b) and choose to comply with (C)(3)(b)(ii) or (C)(4)(b)(ii), respectively, shall install a stack-gas oxygen trim system.

(D) Exemptions

- (1) During periods of unexpected curtailment of normal Gaseous Fuels, permit units subject to the requirements of subsection (C)(3)(a) or (C)(4)(a) which normally burn only Gaseous Fuel shall comply with a NO_x emission limit of either 150 ppmv or 0.215 pound per million Btu of heat input when burning Liquid Fuel. (This exemption shall not exceed the period of natural gas curtailment, and specifically includes equipment and emission testing time not exceeding 48 hours per calendar year).
- (2) Permit units which are located at Solar Power Production Facilities and are subject to the requirements of subsection (C)(3)(a) shall comply with the following NO_x emission limits in lieu of complying with subsection (C)(3)(a):
 - (a) 125 ppmv, when the permit unit is located at SEGS VI or SEGS VII in Kramer Junction and is operating at 40% or less of Rated Heat Input; and
 - (b) 70 ppmv, when the permit unit is located at SEGS VI or SEGS VII in Kramer Junction and is operating at more than 40% of Rated Heat Input, or when the permit unit is located at SEGS III, IV, V in Kramer Junction or SEGS VIII or IX in Harper Lake under all operating conditions; and,
 - (c) those limits specified in (C)(3)(a), for all other such permit units and operating conditions.
- (3) The provisions of Section (C) of this rule shall not apply to permit units which have no Annual Heat Input (Annual Heat Input equals zero). The Owner/Operator of any permit unit who wishes to claim an exemption pursuant to this subsection shall meet the record keeping requirements of this rule so as to be able to prove the exemption status.
- (4) Units which are subject to District Rules 1158 or 1161 are exempt from this rule.

- (5) Units located outside of the Federal Ozone Non-Attainment Area (FONA) are exempt from this rule.

(E) Monitoring and Records

(1) Emissions Compliance Testing:

- (a) Frequency: All permit units covered under subsections (C)(3) and (C)(4) shall demonstrate compliance through emission compliance testing not less than once every 12 months, except that permit units complying with subsection (C)(3)(b)(iii) or (C)(4)(b)(iii) shall be tuned not less than once every 12 months, and permit units claiming an exemption pursuant to subsection (D)(1) which burn a secondary fuel for less than 720 cumulative hours in the twelve month consecutive period prior to testing shall not be required to perform compliance testing for that fuel.
- (b) Procedures:
 - (i) Compliance testing required by this rule shall follow the administrative procedures outlined in the District's Compliance Test Procedural Manual. All emission determinations shall be made as stipulated in the test protocol accepted by the District.
 - (ii) Emission determinations shall include, at a minimum, one emission compliance test conducted at 90% of the maximum firing rate allowed by the District permit or at normal operating conditions.
 - (iii) No compliance determination shall be established based on data obtained from compliance testing, including integrated sampling methods, during a start-up period or shut-down period.
 - (iv) All ppmv emission limits specified in subsections (C)(3)(a), (C)(4)(a) and (D)(1) are referenced at dry stack-gas conditions and 3.0 percent by volume stack-gas oxygen.
 - (v) All lbs/MMBtu NO_x emission rates shall be calculated as pounds of nitrogen dioxide per MMBtu of heat input.
 - (vi) All emission concentrations and emission rates shall be based on hourly averages.

(2) Records and Reporting

- (a) For all permit units subject to this rule, the Owner/Operators shall monitor and record for each permit unit the High Heat Value and cumulative annual usage of each fuel. The cumulative annual usage of each fuel shall be monitored from utility service meters, purchase or tank fill records. A statement of the heat input for the previous calendar year shall be submitted to the District by March 1 each year.
- (b) For permit units exempt from subsection (C)(3)(a) or (C)(4)(a) in accordance with subsection (D)(1), the Owner/Operators shall monitor and

record for each permit unit the cumulative annual hours of operation on each Liquid Fuel.

- (c) All data shall be kept current and on site for a minimum of five years, and provided to District or state personnel on request.
- (d) The Owner/Operators of permit units subject to this rule shall submit all required compliance test reports to the District.
- (e) For each permit unit complying with subsection (C)(3)(b)(iii) or (C)(4)(b)(iii), records verifying that the tune-up has been performed for each fuel burned shall be maintained on site for five years. If a different tune-up procedure from that described in Section (I) is used, then a copy of this procedure shall be kept on site for five years. Such records shall be provided on request by the APCO.
- (f) Test reports shall include the operational characteristics of all flue-gas NOx reduction equipment.

(F) Test Methods

- (1) Compliance with the NOx, carbon monoxide and oxygen requirements of Section C shall be determined using the following test methods:
 - (a) Oxides of Nitrogen - EPA Method 7E or ARB Method 100
 - (b) Carbon Monoxide - EPA Method 10 or ARB Method 100
 - (c) Stack Gas Oxygen - EPA Method 3 or 3A or ARB Method 100 (d) NOx Emission Rate (Heat Input Basis) - EPA Method 19
- (2) HHV determination shall be by one of the following test methods:
 - (a) ASTM D 240-87 or ASTM D 2382-88 for liquid hydrocarbon fuels; or
 - (b) ASTM D 1826-88, or ASTM D 1945-81 in conjunction with ASTM D 3588-89 for Gaseous Fuels.

(G) Compliance Schedule

- (1) The Owner/Operator of a permit unit which becomes subject to the requirements of subsection (C)(3)(a) or (C)(4)(a) by exceeding the Annual Heat Input thresholds in subsection (B)(1)(h) for a calendar year, or by operating the permit unit so that an exemption pursuant to (D)(3) no longer applies, shall fulfill the following increments of progress:
 - (a) On or before December 31 of the calendar year immediately following the year that the Annual Heat Input threshold was exceeded or the permit unit commenced operation, submit an Emissions Control Plan containing the information outlined in subsection (B)(1)(e).

- (b) No later than three calendar years following the submission of the Emissions Control Plan, demonstrate final compliance with all applicable standards and requirements of the rule.
- (2) Failure to perform interim measures as set forth in a submitted Emissions Control Plan shall constitute a violation of this rule.

(H) Severability of Portions of this Rule

If any portion of this rule is found to be invalid or unenforceable, such finding shall have no effect on the validity and enforceability of the remaining portions of the rule, which are severable and shall continue to be in full force and effect.

(I) Tuning Procedure

- (1) Nothing in these Tuning Procedures shall be construed to require any act or omission that would result in unsafe conditions or would be in violation of any regulation or requirement established by Factory Mutual, Industrial Risk Insurers, National Fire Prevention Association, the California Department of Industrial Relations (Occupational Safety and Health Division), the Federal Occupational Safety and Health Administration, or other relevant regulations and requirements.
- (2) Tuning Procedure for Forced-Draft Permit units¹
 - (a) Operate the permit unit at the firing rate most typical of normal operation. If the permit unit experiences significant load variations, operate it at its average firing rate.
 - (b) At this firing rate, record stack gas temperature, oxygen concentration, and CO concentration (for Gaseous Fuels) or smoke-spot number² (for Liquid Fuels), and observe flame conditions after permit unit operation stabilizes at the firing rate selected. If the excess oxygen in the stack gas is at the lower end of the range of typical minimum values,³ and if the CO emissions are low and there is no smoke, the permit unit is probably operating at near optimum efficiency - at this particular firing rate. However, complete the remaining portion of this procedure to determine whether still lower oxygen levels are practical.
 - (c) Increase combustion air flow to the furnace until stack gas oxygen levels increase by one to two percent over the level measured in subsection (I)(2)(b). As in (I)(2)(b), record the stack gas temperature, CO concentration (for Gaseous Fuels), or smoke-spot number (for Liquid

¹ This tuning procedure is based on a tune-up procedure developed by KVB, Inc. for the USEPA.

² The smoke-spot number can be determined with ASTM test method D-2156 or with the Bacharach method.

³ Typical minimum oxygen levels for boilers at high firing rates are: For natural gas: 0.5 - 3%; 2. For Liquid Fuels: 2 - 4%

Fuels), and observe flame conditions for these higher oxygen levels after Boiler operation stabilizes.

- (d) Decrease combustion air flow until the stack gas oxygen concentration is at the level measured in (I)(2)(b). From this level gradually reduce the combustion air flow, in small increments. After each increment, record the stack gas temperature, oxygen concentration, CO concentration (for Gaseous Fuels) and smoke-spot number (for Liquid Fuels). Also, observe the flame and record any changes in its condition.
- (e) Continue to reduce combustion air flow stepwise, until one of these limits is reached:
 - (i) Unacceptable flame conditions - such as flame impingement on furnace walls or burner parts, excessive flame carryover, or flame instability.
 - (ii) Stack gas CO concentrations greater than 400 ppmv.
 - (iii) Smoking at the stack.
 - (iv) Equipment-related limitations - such as low windbox/furnace pressure differential, built in air-flow limits, etc.
- (f) Develop an O₂/CO curve (for Gaseous Fuels) or O₂/smoke curve (for Liquid Fuels) using the excess oxygen and CO or smoke-spot number data obtained at each combustion air flow setting.
- (g) From the curves prepared in (I)(2)(f), find the stack gas oxygen levels where the CO emissions or smoke-spot number equal the following values:

Fuel	Measurement	Value
Gaseous	CO Emissions	400 ppmv
#1 and #2 oils	smoke-spot number	number 1
# 4 Oil	smoke-spot number	number 2
# 5 Oil	smoke-spot number	number 3
Other oils	smoke-spot number	number 4

The above conditions are referred to as the CO or smoke thresholds, or as the minimum excess oxygen levels.

Compare this minimum value of excess oxygen to the expected value provided by the combustion permit unit manufacturer. If the minimum level found is substantially higher than the value provided by the combustion permit unit manufacturer, burner adjustments can probably be made to improve fuel and air mix, thereby allowing operations with less air.

- (h) Add 0.5 to 2.0 percent to the minimum excess oxygen level found in (I)(2)(g) and reset burner controls to operate automatically at this higher stack gas oxygen level. This margin above the minimum oxygen level accounts for fuel variations, variations in atmospheric conditions, load changes, and nonrepeatability or play in automatic controls.
 - (i) If the load of the combustion permit unit varies significantly during normal operation, repeat (I)(2)(a) through (h) for firing rates that represent the upper and lower limits of the range of the load. Because control adjustments at one firing rate may affect conditions at other firing rates, it may not be possible to establish the optimum excess oxygen level at all firing rates. If this is the case, choose the burner control settings that give the best performance over the range of firing rates. If one firing rate predominates, setting should optimize conditions at the rate.
 - (j) Verify that the new settings can accommodate the sudden load changes that may occur in daily operation without adverse effects. Do this by increasing and decreasing load rapidly while observing the flame and stack. If any of the conditions in (I)(2)(e) result, reset the combustion controls to provide a slightly higher level of excess oxygen at the affected firing rates. Next, verify these new settings in a similar fashion. Then make sure that the final control settings are recorded at steady-state operating conditions for future reference.
 - (k) When the above checks and adjustments have been made, record data and attach combustion analysis to permit unit records. Indicate the name and title of the person performing the tune-up, the date the tune-up was performed, and sign the record.
- (3) Equipment Tuning Procedure for Natural Draft Fired Permit units
- (a) Preliminary Analysis
 - (i) CHECK THE OPERATING PRESSURE OR TEMPERATURE. Operate the permit unit at the lowest acceptable pressure or radiation losses. Determine the pressure or temperature that will be used as a basis for comparative combustion analysis before and after tune-up.
 - (ii) COMBUSTION ANALYSIS. Perform an "as is" combustion analysis (CO₂, O₂, etc.) with a warmed up permit unit at high and low fire, if possible. In addition to data obtained from combustion analysis, also record the following:
 - a. Inlet fuel pressure at burner (at high & low fire); and
 - b. Draft above draft hood or barometric damper (at high, medium, and low settings); and
 - c. Steam pressure, water temperature, or process fluid pressure or temperature entering and leaving the permit unit.

- d. Permit unit rate if meter is available.
- (b) Adjustments: while taking combustion readings with a warmed up permit unit operated at the Rated Heat Input, perform checks and adjustments as follows:
 - (i) Adjust permit unit to fire at rate; record fuel manifold pressure.
 - (ii) Adjust draft and/or fuel pressure to obtain acceptable, clean combustion at high, medium and low firing rates. The CO value should always be below 400 ppmv at 3% O₂. If CO is high make necessary adjustments.
 - (iii) Check to ensure permit unit light offs are smooth and safe. A reduced fuel pressure test at both high and low fire should be conducted in accordance with the manufacturer's instructions and maintenance manuals.
 - (iv) Check and adjust operations of modulation controller. Ensure proper, efficient and clean combustion through the range of firing rates.
 - (v) When above adjustments and corrections have been made, record all data.
- (c) Final Test: Perform a final combustion analysis with a warmed up permit unit at high, medium and low firing rates, whenever possible. In addition to data from combustion analysis, also check and record:
 - (i) fuel pressure at burner (at high, medium and low settings); and
 - (ii) draft above draft hood or barometric damper (at high, medium, and low settings); and
 - (iii) steam pressure, water temperature, or process fluid pressure or temperature entering and leaving the permit unit; and
 - (iv) permit unit rate if meter is available.

When the above checks and adjustments have been made, record data and attach combustion analysis to permit unit records. Indicate the name and title of the person performing the tune-up, the date the tune-up was performed, and sign the record.

See SIP Table at <http://www.mdaqmd.ca.gov/>

Mojave Desert
Air Quality Management District



Final
Staff Report
Outlining Amendments to
Rule 461 – *Gasoline Transfer and Dispensing*
Rule 462 – *Organic Liquid Loading*
Rule 463 – *Storage of Organic Liquids*

Amended on
January 22, 2018

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STAFF REPORT
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List of Acronyms

AST	Aboveground Storage Tank
AVAQMD	Antelope Valley Air Quality Management District
BACT	Best Available Control Technology
BARCT	Best Available Retrofit Control Technology
CARB	California Air Resources Board
CCAA	California Clean Air Act
CEQA	California Environmental Quality Act
CTG	Control Technology Guideline
EO	Executive Order
EVR	Enhanced Vapor Recovery
FCAA	Federal Clean Air Act
H&S Code	California Health & Safety Code
MDAB	Mojave Desert Air Basin
MDAQMD	Mojave Desert Air Quality Management District
mm Hg	Millimeters of Mercury
NO _x	Oxides of Nitrogen
ORVR	Onboard Refueling Vapor Recovery
PCAPCD	Placer County Air Pollution Control District
psia	Pound per Square Inch Absolute
RACT	Reasonably Available Control Technology
SBCAPCD	San Bernardino County Air Pollution Control District
SCAQMD	South Coast Air Quality Management District
SIP	State Implementation Plan
SO _x	Oxides of Sulfur
USEPA	U.S. Environmental Protection Agency
U.S.C.	United States Code
UST	Underground Storage Tank
VOC	Volatile Organic Compounds
YSAQMD	Yolo-Solano Air Quality Management District

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STAFF REPORT
Rule 461 – *Gasoline Transfer and Dispensing*
Rule 462 – *Organic Liquid Loading*
Rule 463 – *Storage of Organic Liquids*

I. PURPOSE OF STAFF REPORT

A staff report serves several discrete purposes. Its primary purpose is to provide a summary and background material to the members of the Governing Board. This allows the members of the Governing Board to be fully informed before making any required decision. It also provides the documentation necessary for the Governing Board to make any findings, which are required by law to be made prior to the approval or adoption of a document. In addition, a staff report ensures that the correct procedures and proper documentation for approval or adoption of a document have been performed. Finally, the staff report provides evidence for defense against legal challenges regarding the propriety of the approval or adoption of the document.

II. EXECUTIVE SUMMARY

The FCAA requires areas designated non-attainment and classified moderate or above to implement Reasonably Available Control Technology (RACT) for sources subject to Control Techniques Guidelines (CTG) documents issued by United States Environmental Protection Agency (USEPA) for “major sources” of volatile organic compounds (VOCs) and oxides of nitrogen (NO_x) which are ozone precursors. The District adopted the *2015 8-Hour Reasonably Available Control Technology – State Implementation Plan Analysis (RACT SIP Analysis)* in February, 2015 which committed to amending Rule 461 – *Gasoline Transfer and Dispensing*, Rule 462- *Organic Liquid Loading* and Rule 463 – *Storage of Organic Liquids* to current Federal RACT.

District Rule 461- *Gasoline Transfer and Dispensing*, and Rule 462 – *Organic Liquid Loading* was last amended on May 25, 1994, Rule 463 – *Storage of Organic Liquids* was last amended on November 2, 1992, and all three rules were approved as RACT into the SIP in 1995. (60 FR 21702, 05/03/1995). Previous versions of these rules addressed requirements outlined in the applicable CTG’s published in the 1970s: Design Criteria for Stage I Vapor Control Systems – Gasoline Stations (EPA-450/R-75-102 November 1975), Control of Hydrocarbons from Tank Truck Gasoline Loading Terminals (EPA-450/2-77-026 October 1977), Control of Volatile Organic Emissions from Bulk Gasoline Plants (EPA-450/2-77-035 December 1977), Control of Volatile Organic Emissions from Bulk Gasoline Plants (EPA-450/2-77-035 December 1977), Control of Volatile Organic Emission from Storage of Petroleum Liquids in Fixed-Roof Tanks (EPA-450/2-77-036 December 1977), Control of Volatile Organic Emission from Petroleum Liquid Storage in External Floating Roof Tanks (EPA-450/2-78-047 December 1978) and Control of Volatile Organic Compound Leaks from Gasoline Tank Trucks and Vapor Collection Systems (EPA-450/2-78-051 December 1978).

The amendments are based on the Control Technology Guidelines (CTGs), and various district rules deemed as fulfilling Reasonably Available Control Technology (RACT) requirements, including but not limited to: Antelope Valley Air Quality Management District (AVAQMD) Rule 461 – *Gasoline Transfer and Dispensing* (76 FR 5277, 01/31/2001), AVAQMD Rule 462 – *Organic Liquid Loading* (62 FR 60784, 11/13/1997), AVAQMD Rule 463 – *Storage of Organic Liquids* (61 FR 54941, 10/23/1996); Placer County Air Pollution Control District (PCAPCD) Rule 212 – *Storage of Organic Liquids* (74 FR 27714, 06/11/2009), PCAPCD Rule 213 – *Gasoline Transfer in Stationary Storage Containers* (80 FR 7345, 02/10/2015); South Coast Air Quality Management District (SCAQMD) Rule 461 – *Gasoline Transfer and Dispensing* (78 FR 21543, 04/11/2013), SCAQMD Rule 462 – *Organic Liquid Loading* (64 FR 39037, 07/21/1999), SCAQMD Rule 463 – *Storage of Organic Liquids* (78 FR 18854, 11/04/2011); and Yolo-Solano Air Quality Management District (YSAQMD) Rule 2.21 – *Organic Liquid Storage and Transfer* (71 FR 63694, 10/31/2006), YSAQMD Rule 2.22 – *Gasoline Dispensing Facilities* (81 FR 6763, 02/09/2016).

The amendments to Rules 461, 462 and 463 address the *RACT SIP Analysis* commitments. All of the amendments update rule definitions and rule clarity. Specifically, the amendments in Rule 461 which would update mobile fueler requirements, CARB certified equipment requirements, spill box installation requirement, Phase II vapor recovery capacity and emission factor, self-inspection, record keeping requirements, updated performance testing and re-verification requirements, added an exemption for ORVR (onboard refueling vapor recovery fleets) and updated required signage at gasoline dispensing facilities. The amendments to Rule 462 would update CARB certified equipment requirements, imposing a reduced emission requirement for class A facilities, updated loading requirements, Class B facilities would require a vapor recovery system, submerged fill loading and a pressure/vent valve. Self-inspection, record keeping and test methods have also been updated. The amendments to Rule 463 update rule applicability, reduce the allowed vapor pressure of organic liquid storage tanks greater than 39,630 gallons and update self-inspection, maintenance and record keeping.

III. STAFF RECOMMENDATION

Staff recommended that the Governing Board of the Mojave Desert Air Quality Management District (MDAQMD or District) amend proposed Rules 461 – *Gasoline Transfer and Dispensing*, Rule 462 – *Organic Liquid Storage*, and Rule 463 – *Storage of Organic Liquids* and approve the appropriate California Environmental Quality Act (CEQA) documentation. This action is necessary to satisfy 42 U.S.C. §§7511a (FCAA §182) which requires that ozone non-attainment areas implement RACT for sources that are subject to CTGs and for major sources of ozone precursors.

This rule has been amended.

IV. LEGAL REQUIREMENTS CHECKLIST

The findings and analysis as indicated below are required for the procedurally correct to amend Rule 461 – *Gasoline Transfer and Dispensing*, Rule 462 – *Organic Liquid Loading*, and Rule 463 – *Storage of Organic Liquids*. Each item is discussed, if applicable, in Section V. Copies of related documents are included in the appropriate appendices.

FINDINGS REQUIRED FOR RULES & REGULATIONS:

- X Necessity
- X Authority
- X Clarity
- X Consistency
- X Nonduplication
- X Reference
- X Public Notice & Comment
- X Public Hearing

REQUIREMENTS FOR STATE IMPLEMENTATION PLAN SUBMISSION (SIP):

- X Public Notice & Comment
- X Availability of Document
- X Notice to Specified Entities (State, Air Districts, USEPA, Other States)
- X Public Hearing
- X Legal Authority to adopt and implement the document.
- X Applicable State laws and regulations were followed.

ELEMENTS OF A FEDERAL SUBMISSION:

- X Elements as set forth in applicable Federal law or regulations.

CALIFORNIA ENVIRONMENTAL QUALITY ACT REQUIREMENTS (CEQA):

- N/A Ministerial Action
- X Exemption
- N/A Negative Declaration
- N/A Environmental Impact Report
- X Appropriate findings, if necessary.
- X Public Notice & Comment

SUPPLEMENTAL ENVIRONMENTAL ANALYSIS (RULES & REGULATIONS ONLY):

- X Environmental impacts of compliance.
- N/A Mitigation of impacts.
- N/A Alternative methods of compliance.

OTHER:

- X Written analysis of existing air pollution control requirements
- N/A Economic Analysis
- X Public Review

V. DISCUSSION OF LEGAL REQUIREMENTS

A. REQUIRED ELEMENTS/FINDINGS

This section discusses the State of California statutory requirements that apply to the amendment of Rules 461, 462, and 463. These are actions that need to be performed and/or information that must be provided in order to amend the rule in a procedurally correct manner.

1. State Findings Required for Adoption of Rules & Regulations:

Before adopting, amending, or repealing a rule or regulation, the District Governing Board is required to make findings of necessity, authority, clarity, consistency, non-duplication, and reference based upon relevant information presented at the hearing. The information below is provided to assist the Board in making these findings.

a. Necessity:

The amendments to Rules 461, 462, and 463 are necessary to satisfy 42 U.S.C. §§7511a (FCAA §182) which requires that ozone non-attainment areas implement RACT for sources that are subject to CTGs and for major sources of ozone precursors.

b. Authority:

The District has the authority pursuant to California Health and Safety Code (H & S Code) §40702 to adopt, amend or repeal rules and regulations.

c. Clarity:

The amendment to Rules 461, 462, and 463 is clear in that they are written so that the persons subject to the Rule can easily understand the meaning.

d. Consistency:

The amendments to Rules 461, 462, and 463 are in conformance with the applicable CTG's. The amendments to Rules 461, 462, and 463 are in harmony with, and not in conflict with or contradictory to any State law or regulation, Federal law or regulation, or court decisions.

e. Nonduplication:

CTG's and RACT are not directly enforceable; therefore this rule is necessary to enforce standards and is non-duplicative. The

amendments to Rules 461, 462, and 463 do not impose the same requirements as any existing State or Federal law or regulation because the District is amending this rule in response to federal VOC RACT requirements.

f. Reference:

The District has the authority pursuant to H & S Code §40702 to adopt, amend or repeal rules and regulations.

g. Public Notice & Comment, Public Hearing:

Notice for the public hearing for the proposed amendments to Rules 461, 462, and 463 were published September 22, 2017. See Appendix “B” for a copy of the public notice. See Appendix “C” for copies of comments, if any, and District responses.

2. Federal Elements (SIP Submittals, Other Federal Submittals).

Submittals to USEPA are required to include various elements depending upon the type of document submitted and the underlying Federal law that requires the submittal. The information below indicates which elements are required for the amendments of Rules 461, 462, and 463 and how they were satisfied.

a. Satisfaction of Underlying Federal Requirements:

The Federal Clean Air Act (FCAA) requires areas designated non-attainment and classified moderate and above to implement RACT for sources subject to CTG documents issued by USEPA for “major sources” of VOCs and NO_x that are ozone precursors. Because the District has an existing SIP rule for this CTG category, the District committed to adopting an updated RACT rule for metal parts and products coating operations. The amendments are based on the CTGs and various district rules deemed as fulfilling RACT requirements, including but not limited to: Antelope Valley Air Quality Management District Rule 461 – *Gasoline Transfer and Dispensing*, Rule 462 – *Organic Liquid Loading*, Rule 463 – *Storage of Organic Liquid*; Placer County Air Pollution Control District Rule 212 – *Storage of Organic Liquids*, Rule 213 – *Gasoline Transfer in Stationary Storage Containers*; South Coast Air Quality Management District Rule 461 – *Gasoline Transfer and Dispensing*, Rule 462 – *Organic Liquid Loading*, Rule 463 – *Storage of Organic Liquids*; and Yolo-Solano Air Quality Management District Rule 2.21 – *Organic Liquid Storage and Transfer*, Rule 2.22 – *Gasoline Dispensing Facilities*.

Public Notice and Comment:

Notice for the public hearing for the proposed amendments to Rules 461, 462, and 463 was initially published September 22, 2017. Revisions for the proposed amendments were published on December 22, 2017. See Appendix “B” for a copy of the public notice. See Appendix “C” for copies of comments, if any, and District responses.

c. Availability of Document:

Copies of the proposed amendments of Rules 461, 462, and 463 as well as the accompanying draft staff report was made available to the public on September 12, 2017, subsequent revisions to the draft rules and staff report were made available on December 5, 2017. The proposed amendments were initially reviewed by the Technical Advisory Committee, a committee consisting of a variety of regulated industry and local governmental entities, on October 3rd, 2017, and again prior to the January hearing on January 9th, 2018.

d. Notice to Specified Entities:

Copies of the proposed amendment of Rules 461, 462, and 463 and the accompanying draft staff report was sent to all affected agencies. The proposed amendments were initially sent to the California Air Resources Board (CARB) and U.S. Environmental Protection Agency (USEPA) on September 12, 2017, revisions to the draft staff report was also sent on December 5th, 2017.

e. Public Hearing:

A public hearing to consider the proposed amendments of Rule 461, 462, and 463 was initially set for October 23, 2017, and was then continued to January 22, 2018.

f. Legal Authority to Adopt and Implement:

The District has the authority pursuant to H&S Code §40702 to adopt, amend, or repeal rules and regulations and to do such acts as may be necessary or proper to execute the duties imposed upon the District.

g. Applicable State Laws and Regulations Were Followed:

Public notice and hearing procedures pursuant to H&S Code §§40725-40728 have been followed. See Section (V)(A)(1) above for compliance with state findings required pursuant to H&S Code §40727. See Section (V)(B) below for compliance with the required analysis of existing requirements pursuant to H&S Code

§40727.2. See Section (V)(C) for compliance with economic analysis requirements pursuant to H&S Code §40920.6. See Section (V)(D) below for compliance with provisions of the CEQA.

B. WRITTEN ANALYSIS OF EXISTING REQUIREMENTS

H & S Code §40727.2 requires air districts to prepare a written analysis of all existing federal air pollution control requirements that apply to the same equipment or source type as the rule proposed for modification by the district.

The FCAA requires areas designated non-attainment for ozone and classified moderate and above to adopt and maintain RACT rules to control the emissions of VOCs and NO_x for categories which the USEPA has adopted a CTG and for all categories where there are major stationary sources of air pollution (42 U.S.C. §7511a(b)(2), FCAA 182(b)(2)). For purposes of the FCAA, portions of the District have been designated non-attainment for ozone and classified severe-17.

District Rule 461- *Gasoline Transfer and Dispensing*, and Rule 462 – *Organic Liquid Loading* was last amended on May 25, 1994, Rule 463 – *Storage of Organic Liquids* was last amended on November 2, 1992, and all three rules were approved as RACT into the SIP in 1995. (60 FR 21702, 05/03/1995). Previous versions of these rules addressed requirements outlined in the applicable CTG's published in the 1970s: Design Criteria for Stage I Vapor Control Systems – Gasoline Stations (EPA-450/R-75-102 November 1975), Control of Hydrocarbons from Tank Truck Gasoline Loading Terminals (EPA-450/2-77-026 October 1977), Control of Volatile Organic Emissions from Bulk Gasoline Plants (EPA-450/2-77-035 December 1977), Control of Volatile Organic Emissions from Bulk Gasoline Plants (EPA-450/2-77-035 December 1977), Control of Volatile Organic Emission from Storage of Petroleum Liquids in Fixed-Roof Tanks (EPA-450/2-77-036 December 1977), Control of Volatile Organic Emission from Petroleum Liquid Storage in External Floating Roof Tanks (EPA-450/2-78-047 December 1978) and Control of Volatile Organic Compound Leaks from Gasoline Tank Trucks and Vapor Collection Systems (EPA-450/2-78-051 December 1978).

C. ECONOMIC ANALYSIS

1. General

RACT is defined as the lowest emissions limitation that a particular source is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility (44 FR 53762, September 17, 1979). Rules 461, 462, and 463 are equivalent to rules that were determined by USEPA to fulfill RACT¹ This determination by USEPA means that the provisions of Rules 461, 462, and 463 are, by definition, cost effective.

¹ Antelope Valley Air Quality Management District (AVAQMD) Rule 461 – *Gasoline Transfer and Dispensing* (76 FR 5277, 01/31/2001), AVAQMD Rule 462 – *Organic Liquid Loading* (62 FR 60784, 11/13/1997), AVAQMD

2. Incremental Cost Effectiveness

Pursuant to H&S Code §40920.6, incremental cost effectiveness calculations are required for rules and regulations which are adopted or amended to meet the California Clean Air Act (CCAA) requirements for Best Available Retrofit Control Technology (BARCT) or “all feasible measures” to control volatile compounds (VOCs), oxides of nitrogen (NOx) or oxides of sulfur (SOx). The amendment of Rules 461, 462, and 463 is not subject to incremental cost effectiveness calculations because it does not involve BARCT or “all feasible measures”.

D. ENVIRONMENTAL ANALYSIS (CEQA)

Through the process described below the appropriate CEQA process for the amendments to Rules 461, 462, and 463 was determined.

1. The amendments to Rules 461, 462, and 463 meet the CEQA definition of “project”. They are not “ministerial” actions.
2. The amendments to Rules 461, 462, and 463 are exempt from CEQA review because the amendments are more stringent than the prior versions and do not create any adverse impacts on the environment. Because there is no potential that the amendments might cause the release of additional air contaminants or create any adverse environmental impacts, a Class 8 categorical exemption (14 Cal. Code Reg. §15308) applies. Copies of the documents relating to CEQA can be found in Appendix “D”.

E. SUPPLEMENTAL ENVIRONMENTAL ANALYSIS

1. Potential Environmental Impacts

The amendments to Rules 461, 462 and 463 do not introduce any new equipment or control technologies; therefore these rules do not pose any additional environmental impact.

2. Mitigation of Impacts

N/A

3. Alternative Methods of Compliance

Rule 463 – *Storage of Organic Liquids* (61 FR 54941, 10/23/1996); Placer County Air Pollution Control District (PCAPCD) Rule 212 – *Storage of Organic Liquids* (74 FR 27714, 06/11/2009), PCAPCD Rule 213 – *Gasoline Transfer in Stationary Storage Containers* (80 FR 7345, 02/10/2015); South Coast Air Quality Management District (SCAQMD) Rule 461 – *Gasoline Transfer and Dispensing* (78 FR 21543, 04/11/2013), SCAQMD Rule 462 – *Organic Liquid Loading* (64 FR 39037, 07/21/1999), SCAQMD Rule 463 – *Storage of Organic Liquids* (78 FR 18854, 11/04/2011); and Yolo-Solano Air Quality Management District (YSAQMD) Rule 2.21 – *Organic Liquid Storage and Transfer* (71 FR 63694, 10/31/2006), YSAQMD Rule 2.22 – *Gasoline Dispensing Facilities* (81 FR 6763, 02/09/2016).

N/A

F. PUBLIC REVIEW

See Staff Report Section (V)(A)(1)(g) and (2)(b), as well as Appendix “B”

VI. TECHNICAL DISCUSSION

A. SOURCE DESCRIPTION

The District has over 200 facilities subject to all or some of the rules in this amendment, which include retail and non-retail gas stations, organic liquid storage facilities and bulk transfer plants.

B. EMISSIONS

The amendments to Rules 461, 462 and 463 address the RACT SIP Analysis commitments. All of the amendments update rule definitions, rule clarity. Specifically the amendments in Rule 461 updates mobile fueler requirements, CARB certified equipment requirements, standing loss requirements, spill box installation requirement, Phase II vapor recovery capacity and emission factor, self-inspection and record keeping requirements, updated performance testing and re-verification requirements, added a severability requirement as well as an exemption for Onboard Refueling Vapor Recovery (ORVR) fleets, and updated required signage at gasoline dispensing facilities. Rule 462 would update CARB certified equipment requirements, reduced ‘vapor tight’ detection limit, severability requirement, imposing a reduced emission requirement for class A facilities, updated loading requirements, Class B facilities would require a vapor recovery system, submerged fill loading and a pressure/vent valve. Self-inspection, record keeping and test methods have also been updated. Rule 463 would update rule applicability, reduce the allowed vapor pressure of organic liquid storage tanks greater than 39,630 gallons and update self-inspection, maintenance, record keeping and testing.

C. CONTROL REQUIREMENTS

Rules 461, 462, and 463 address control requirements through tightened applicability, lower uncontrolled emissions limits, mobile fueler applicability, spill box installation requirement, reduced ‘vapor tight’ detection limit, certified equipment installation, and more rigorous self-inspection, maintenance and record keeping requirements.

D. RULE SUMMARY

This section gives a brief overview of the amendments to Rules 461, 462, and 463.

Minor format changes have been made throughout which are for clarity and consistency and not substantive. These changes include, but are not limited to, capitalization of defined terms, relocation of commonly defined terms to Rule 102.

Rule 461 – *Gasoline Transfer and Dispensing*

The definitions in section (B) of Rules 461, have been modified to add definitions which are specific to this rule, and remove definitions that are contained in Rule 102.

Definitions Added: Altered Gasoline and Transfer Dispensing Facility, Backfilling, Balance System, Bellows-Less Nozzle, Coaxial Hose, Dry Break, End of Cycle, Enhanced Vapor Recovery (EVR), Executive Order, Fueling Position, Insertion Interlock Mechanism, Major Defect, Minor Defect, Onboard Refueling Vapor Recovery (ORVR), Performance Test, Phase I Vapor Recovery System, Phase II Vapor Recovery System, Rebuild, Re-Verification Test, Spill Box, Standing Loss Control, Vacuum-Assist System, Vapor Check Valve.

Definitions Modified: Vapor Tight

Definitions Removed: Certified Vapor Recovery System, Gasoline, Gasoline Storage and Dispensing Facility, Gasoline Vapors, Retail Gasoline Station, Submerged Fill Pipe, Vapor Recovery System.

Substantive updates to the Rule 461 are as follows: Subsection (C)(1) includes mobile fueler applicability requirements with those having a capacity of more than 251 gallons. Sections (C)(1), (C)(2) and (C)(3) includes updated requirements for CARB certification for Phase I and Phase II vapor recovery equipment and includes language that reflects the CARB Executive Orders. Subsection (C)(1)(h) requires that a spill box be installed whenever an underground storage tank is installed or replaced. Subsection (C)(1)(k) specifies that gasoline shall not be stored in open containers, nor spilled or sprayed which allows contamination of the air or ground. Subsection (C)(2) includes requirements for mobile fuelers with a capacity of more than 120 gallons. Subsection (C)(2)(a) proposes to add an emission factor to not exceed 0.38 lbs pre 1,000 gallons. Subsection (C)(4) clarifies required self-compliance activities. Subsection (C)(1)(j) addresses standing loss requirements for aboveground storage tanks. Subsection (D)(4) clarifies when a facility is no longer exempt, and the time line for obtaining an operating permit. Subsection (D)(4)(2) outlines requirements for the ORVR exemption for fleets. Subsection (E)(2), clarifies performance testing and re-verification testing requirements and frequency, all retail and non-retail gasoline dispensing facilities will be required to test annually. Subsection (F) expands upon and clarifies what we already require for record keeping. Subsection (G) is updated to reference the latest testing methods outlined in the CARB Executive Orders. Attachment A, updates required signage for posting. Attachments B and C outline weekly and periodic self-inspection and maintenance requirements.

Rule 462 – *Organic Liquid Loading*

The definitions in section (B) of Rules 462, have been modified to change pre-existing definitions, and definitions have been removed that are contained in Rule 102.

Definitions Modified: Class “A” Facility, Class “B” Facility, Vapor Tight detection limits reduced from 10,000 to 3,000 ppm.

Definitions Removed: Fugitive Liquid Leak, Gasoline, Organic Liquid, Organic Materials, Organic Solvents, Switch Loading, Throughput, Vapor Reduction Device, Vapor Recovery System,

Substantive updates to the Rule 462 are as follows: Subsections (C)(1) and (C)(2) propose to include requirements for a CARB certified, or District approved vapor recovery system. Subsection (C)(1)(c) proposes an emission limit of 0.08 pound or less of VOC per thousand (1000) gallons. Subsection (C)(1)(d) proposes that Class “A” facilities utilize bottom loading only. Subsection (C)(1)(f) proposes that backpressure shall not exceed 18 inches of water column pressure. Subsection (C)(1)(g) requires liquid loading hoses and vapor return hoses to be capped or have a secondary valve when not in use. Subsection (C)(2)(a)(i) requires a vapor efficiency of 95%. Subsection (C)(2)(a)(iii) backpressure shall not exceed 18 inches of water column pressure. Subsection (C)(2)(a)(iv) proposes that all gasoline or other equivalent vapor pressure organic liquids shall be transferred with submerged fill loading or bottom loading at Class “B” facilities. Subsection (C)(2)(a)(v) proposes that at Class “B” facilities, the pressure vacuum valve on aboveground tanks be set to eight (8) ounces per square inch, provided that such setting does not exceed the tanks maximum pressure rating. Subsection (D)(5) proposes updated self-inspection requirements. Subsection (F)(1)(a) requires that Title V and MACT sources maintain records for five years. Subsection (F)(1)(b) updated record keeping requirements including: daily throughput, monthly throughput summary – for a rolling twelve month period, daily storage and transfer temperatures of the organic liquid, results of leak inspection checks. (G) updated test methods for compliance verification.

Rule 463 – *Storage of Organic Liquids*

New rules specific definitions have been added to section (B) of Rule 463, and some definitions have been removed that are contained in Rule 102.

Definitions Added: Metallic-Shoe Seal, Resilient-Toroid-Seal, Vapor Tight.

Definitions removed: Gasoline, Organic Liquid, Organic Materials, Organic Solvents, True Vapor Pressure.

Substantive updates to the Rule 463 are as follows: Subsection (B)(3) proposes that Vapor Tight be defined as the detection of less than 1,000 ppm. Subsection (C)(1) proposes reduction in true vapor pressure from 77.5 mm Hg (1.5 psia) to 25.8 mm Hg (0.5 psia) unless it is a pressure tank, meeting pressure requirements at all times or is equipped with a vapor loss control device. Subsection (C)(3)(d) added inspection and maintenance requirements. Subsection (H)(1) updated compliance verification test methods.

E. SIP HISTORY

1. SIP History.

a. SIP in the San Bernardino County Portion of MDAQMD

On July 1, 1993 the MDAQMD was formed pursuant to statute. Pursuant to statute it also retained all the rules and regulations of the SBCAPCD until such time as the Governing Board of the MDAQMD wished to adopt, amend or rescind such rules. The MDAQMD Governing Board, at its very first meeting, reaffirmed all the rules and regulations of the SBCAPCD.

Rules 461, 462 and 463 were originally adopted by the Southern California APCD (JPA Predecessor to the SBCAPCD) on 01/09/76 and subsequently amended on 05/07/76, and 07/09/76. CARB Ex. Ord. G-73 02/01/77 readopted them for the SBCAPCD upon dissolution of the JPA and the formation of the South Coast Air Quality Management District (SCAQMD). The SBCAPCD readopted them on 07/25/77 and subsequently amended all these rules rules again on 10/13/80, 12/19/88, and 11/02/92. Rules 461 and 462 were subsequently amended on 05/25/94. The 11/02/92 version of Rule 463 and the 5/25/94 versions of Rules 461 and 462 were included in the State Implementation Plan (SIP) for the MDAQMD (60 FR 21702, 05/03/1995; 461 & 462 40 CFR 52.220(c)(198)(i)(E)(1) and 463 40 CFR 52.220(c)(191)(i)(C)).

b. SIP in the Riverside County (Blythe/Palo Verde Valley) Portion of the MDAQMD

One of the provisions of the legislation which created the MDAQMD allowed areas contiguous to the MDAQMD boundaries and within the same air basin to leave their current air district and become a part of the MDAQMD. On July 1, 1994 the area commonly known as the Palo Verde Valley in Riverside County, including the City of Blythe, left SCAQMD and joined the MDAQMD. Since USEPA adopts SIP revisions in California as effective within the jurisdictional boundaries of local air districts, when the local boundaries change the SIP as approved by USEPA for that area up to the date of the change remains as the SIP in that particular area. Upon annexation of the Blythe/Palo Verde Valley the MDAQMD acquired the SIP prior to July 1, 1994 that was effective in the Blythe/Palo Verde Valley. Therefore, the SIP history for the Blythe/Palo Verde Valley Portion of the MDAQMD is based upon the rules adopted and approved for that portion of Riverside County by SCAQMD.

Rules 461, 462 and 463 were originally adopted by the Southern California APCD (which was also the predecessor to SCAQMD) on 01/09/76 and subsequently amended on 05/07/76, and 07/09/76. SCAQMD became operational pursuant to statute on February 1,

1977 and acquired all the Southern California APCD rules in effect at that time.

SCAQMD amended all three rules numerous times prior to July 1, 1994 when the Blythe/Palo Verde Valley became part of the MDAQMD. Specifically Rule 461 was amended 2/4/77, 11/18/77, 2/3/78, 1/5/79, 5/4/79, 12/7/79, 1/16/81, 10/15/82, 11/1/85, 3/4/88, and 7/7/89. Rule 462 was amended 5/5/78, 10/14/79, 4/4/86, and 12/7/90 while Rule 463 was amended 8/15/77, 6/1/84, 12/7/90 and 3/11/94. Many of these versions were submitted to USEPA as SIP revisions and a variety of them were approved. As of July 1, 1994 the following versions were effective in the SIP for the Blythe/Palo Verde Valley:

Rule 461 – The 10/15/82 version submitted 2/3/83 and approved on 5/3/84 at 49 FR 18829 (40 CFR 52.220(c)(127)(vii)(B)).

Rule 462 – The 10/14/79 version submitted 7/25/80 and approved on 7/8/82 at 47 FR 29668 (40 CFR 52.220(c)(88)(ii)(B)).

Rule 463 – The 6/1/84 version submitted 10/19/1984 and approved 1/15/87 at 52 FR 1627 (40 CFR 52.220(c)(156)(vii)(A)).

Subsequent versions of all three rules had been submitted and were “SIP Pending” at the time the area was annexed to the MDAQMD. Pursuant to USEPA’s direction those pending submissions which had not been acted upon at the time of annexation were no longer applicable to the area.

Surprisingly USEPA’s 5/3/95 rulemaking action on the MDAQMD versions of these rules listed Rules 461 and 462 as applicable to the MDAQMD SIP but 463 as applicable to SBCAPCD SIP which could potentially have resulted in the MDAQMD 5/25/94 versions of Rule 461 and 462 being the current SIP rules for the Blythe/Palo Verde Valley area of the MDAQMD.

2. SIP Analysis.

The District is requesting that CARB to submit the amendments to Rules 461, 462, and 463 to replace the 1995 SIP versions for San Bernardino County and all versions as indicated above which may be applicable in Riverside County.

In order to replace existing SIP rules the District is required to show that the amendments are not less stringent than the provisions currently in the SIP. Rules 461, 462, and 463 are more stringent than the previous SIP version because the

amendments update California Air Resources Board (CARB) certification requirements, applicability triggers, emission limits, testing frequency, self-inspection requirements, as well as testing and record keeping. Therefore, the amendments to Rules 461, 462, and 463 are more stringent than the 1995 version of the rule.

Appendix “A”

Iterated Version

Rule 461 – *Gasoline Transfer and Dispensing*

Rule 462 – *Organic Liquid Loading*

Rule 463– *Storage of Organic Liquids*

The iterated version is provided so that the changes to an existing rule may be easily found. The manner of differentiating text is as follows:

1. Underlined text identifies new or revised language.
2. ~~Lined-out text~~ identifies language which is being deleted.
3. Normal text identifies the current language of the rule which will remain unchanged by the adoption of the proposed amendments.
4. *[Bracketed italicized text]* is explanatory material that is not part of the proposed language. It is removed once the proposed amendments are adopted

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RULE 461

Gasoline Transfer and Dispensing

(A) General Description

(1) Purpose:

(a) ~~The purpose of this rule is to~~ To limit the emissions of ~~V~~volatile ~~O~~organic ~~C~~ompounds (VOC) and toxic compounds ~~(such as benzene)~~ from the transfer ~~and dispensing and marketing of G~~gasoline, ~~and in conjunction with Rules 462 and 463, limit the emissions from the storage, transfer, and dispensing of gasoline, including bulk facilities, retail service stations, and others, the transport of fuels between these facilities and the transfer of fuel into motor vehicle tanks.~~ *[moved applicable tanks to applicability section of this rule, deleting references to other rules keeping the focus of this rule, on 461, not 462 and 463]*

(2) Applicability:

(a) ~~This rule applies to any~~The provisions of this rule shall apply to gasoline storage and dispensing facility and to any retail gasoline station operating equipment within the MDAQMD jurisdiction. Such facilities are required to have either an authority to construct or a permit to operate such equipment pursuant to provisions of District Regulation II and or Regulation XIII. Specifically, district permit identification numbers beginning with either a "G" or an "N" are impacted by this rule. The permit identification number prefix "G" identifies retail gasoline dispensing equipment; and "N" identifies non-retail gasoline dispensing equipment under permit with MDAQMD. ~~the transfer of Gasoline from any tank truck, or railroad tank car into any stationary storage tank or Mobile Fueler, and from any stationary storage tank or Mobile Fueler into any Mobile Fueler or Motor Vehicle fuel tank.~~ *[To further clarify, applicable language pulled from purpose section above]*

(3) Severability:

(a) ~~If any portion of this rule shall be found to be unenforceable, such finding shall have no affect on the enforceability of the remaining portions of the rule, which shall continue to be in full force and effect.~~ *[New to D6 – added at the suggestion of District Counsel. Language obtained from MD Rule 463]*

(B) Definitions

The definitions contained in District Rule 102 – *Definition of Terms* shall apply unless the term is otherwise defined herein: [Definitions that are commonly used throughout the MDAQMD rule book have been relocated to existing Rule 102 which was most recently amended June 12, 2017, and will be amended concurrently with this amendment.]

(1) “Altered Gasoline Transfer and Dispensing Facility” - is a Gasoline Transfer and Dispensing Facility with any of the following:

(a) The removal or addition of storage tank(s), or changes in the number of Fueling Positions.

(b) The replacement of storage tank(s), dispensing nozzle(s) or other equipment with different characteristics or descriptions from those specified on the existing permit. [New to D3. SCAQMD Rule 461, 4/6/2012]

(2) “Backfilling” - is the covering of the underground storage tank, piping or any associated components with soil, aggregate or other materials prior to laying the finished surface [New to D3. Definition obtained from SCAQMD Rule 461, 4/6/2012]

(3) “Balance System” – A Phase II Vapor Recovery System that operates on the principle of vapor displacement. [New to D3. Definition found in AVAQMD, Rule 461-Gasoline Transfer and Dispensing, 10/21/08]

(4) “Bellows-Less Nozzle” – Any nozzle that incorporates both an assist system and a Gasoline Vapor capture mechanism at the Motor Vehicle filler neck, such that vapors are collected at the vehicle filler neck without the need for an interfacing flexible bellows, and which is certified by the California Air Resources Board (CARB) for operation as a Bellows-less Nozzle. [New D3. Definition found in AVAQMD, Rule 461-Gasoline Transfer and Dispensing, 10/21/08]

(1) ~~“Certified Vapor Recovery System” is a system to limit emissions of gasoline, which has been certified by the California Air Resources Board in accordance with specific criteria listed within the California Administrative Code. [in 102]~~

(5) “Coaxial Hose” – A hose that contains two passages with a configuration of a hose within a hose. One of the passages dispenses the liquid Gasoline into the vehicle fuel tank while the other passage carries the Gasoline Vapors from the vehicle fuel tank to the storage tank. [New to D3. Definition found in AVAQMD, Rule 461-Gasoline Transfer and Dispensing, 10/21/08]

(6) “Dry Break” or poppetted Dry Break is a Phase I vapor recovery component that opens only by connection to a mating device to ensure that no Gasoline vapors escape from the underground storage tank before the vapor return line is

connected and sealed. [New to D3. Definition obtained from SCAQMD Rule 461, 4/6/2012]

(7) “End of Cycle”

- (a) For delivery vehicle - when the delivery Vehicle is emptied or, if not emptied, before taking on more Gasoline.
- (b) For transferring Gasoline to a Motor Vehicle – upon the completion of fueling, by the last customer who was fueling, at the time the problem is detected. [Definition found in AVAQMD, Rule 461-Gasoline Transfer and Dispensing, 10/21/08... Verbiage also used from SCAQMD Rule 461, 4/6/2012(c)(3)(B) to streamline]

(8) “Enhanced Vapor Recovery (EVR)” - means performance standards and specifications set forth in the CARB CP-201 (Certification Procedure for Vapor Recovery Systems at Gasoline dispensing facilities). [New to D3. Definition obtained from SCAQMD Rule 461, 4/6/2012]

(9) “Executive Order” - Orders published by CARB that document the requirements of specific vapor Control Equipment and procedures used in Phase I and Phase II Vapor Recovery Systems. [Definition found in AVAQMD, Rule 461-Gasoline Transfer and Dispensing, 10/21/08]

(10) “Fueling Position” – A fuel dispensing unit consisting of nozzle(s) and meter(s) with the capability to deliver only one fuel product at one time. [New D3. Definition found in AVAQMD, Rule 461-Gasoline Transfer and Dispensing, 10/21/08]

~~(2) “Gasoline” means a~~Any organic liquid, including petroleum distillate and methanol having a Reid Vapor Pressure of 200 mm Hg (3.9 pounds per square inch), or greater, and used as a motor vehicle fuel, or any fuel which is commonly known or sold as gasoline. ~~[in 102]~~

~~(3) “Gasoline Storage and Dispensing Facility” means a~~Any aggregate of one or more stationary storage containers, together with, but not limited to, dispensers, pumps, loading racks and/or control equipment used to store and transfer gasoline. ~~[in 102]~~

~~(4) “Gasoline Vapors” means t~~The organic compounds of gasoline, which exist in a vapor state and include, where present, entrained liquid gasoline. ~~[in 102]~~

(11) “Insertion Interlock Mechanism” – Any CARB certified mechanism that ensures a tight fit at the nozzle fill pipe interface and prohibits the dispensing of Gasoline unless the bellows is compressed. [Definition found in AVAQMD, Rule 461-Gasoline Transfer and Dispensing, 10/21/08]

(12) “Major Defect” - is a defect in the Vapor Recovery System or its component, as listed in California Code of Regulations, Title 17, Part III, Chapter 1, Subchapter

8, Section 94006. [New to D3. Definition obtained from SCAQMD Rule 461, 4/6/2012]

(13) “Minor Defect” - is a defect in any Gasoline transfer and dispensing equipment, which renders the equipment out of good working order but which does not constitute a Major Defect. [New to D3. Definition obtained from SCAQMD Rule 461, 4/6/2012]

~~(9) “Mobile Fueler” is any tank truck or trailer that is used to transport and dispense gasoline from an onboard storage tank into any motor vehicle fuel tank. [New to D3. Definition obtained from SCAQMD Rule 461, 4/6/2012] [Draft definition moved to 102]~~

(14) “Onboard Refueling Vapor Recovery (ORVR)” – Vehicle emission control system that captures fuel vapors from the vehicle gas tank during refueling. [Definition found in AVAQMD, Rule 461-Gasoline Transfer and Dispensing, 10/21/08]

(15) “Performance Test” – is the first test or series of tests performed on a new or altered CARB Certified Gasoline Vapor Recovery System demonstrate compliance with the CARB Executive Order and District permit conditions upon completion of construction or alteration of the Vapor Recovery System. [New to D3. Definition obtained from SCAQMD Rule 461, 4/6/2012]

(16) “Phase I Vapor Recovery System”

Components may include, but are not limited to: [New to D5 – Added per EPA suggestions]

- (a) the couplers that connect tanker trucks to the underground tanks
- (b) spill containment drain valves
- (c) overfill prevention devices
- (d) Pressure/Vacuum Relief (P/V) valves

(17) “Phase II Vapor Recovery System”

Components may include, but are not limited to: [New to D5 – Added per EPA suggestions]

- (a) Gasoline dispensers
- (b) nozzles
- (c) piping, break away, hoses, and face plates
- (d) vapor processors
- (e) system monitors

[Phase I and Phase II obtained from SCAQMD FAQ webpage]

(18) “Rebuild” – An action that repairs, replaces, or reconstructs any part of a component of a vapor recovery system that forms the Gasoline vapor passage of the component, or that comes in contact with the recovered Gasoline vapors in the

component. Rebuild does not include the replacement of a complete component with another CARB certified complete component; nor does it include the replacement of a spout, bellows, or vapor guard of a CARB certified nozzle. The new part shall be CARB certified and as supplied by the qualified manufacturer specifically for the CARB certified nozzle. [New to D3. Definition found in AVAQMD, Rule 461-Gasoline Transfer and Dispensing, 10/21/08]

~~(5) “Retail Gasoline Station” means aAny motor vehicle refueling facility subject to payment of California sales tax on gasoline sales. [in 102]~~

(19) “Re-Verification Test” - is a test or series of tests performed subsequent to the Performance Test on a CARB Certified Gasoline Vapor Recovery System to demonstrate compliance with the CARB Executive Order and District permit conditions. [New to D3. Definition obtained from SCAQMD Rule 461, 4/6/2012]

(20) “Spill Box” - is an enclosed container around a Phase I fill pipe that is designed to collect Gasoline spillage resulting from disconnection between the liquid Gasoline delivery hose and the fill pipe. [New to D3. Definition obtained from SCAQMD Rule 461, 4/6/2012]

~~(6) “Submerged Fill Pipe” means aAny discharge pipe or nozzle that meets one of the following conditions:~~

~~(a) Where the tank is filled from the top, the end of the discharge pipe or nozzle is totally submerged when the liquid level is 6 inches from the bottom of the tank.~~

~~(b) Where the tank is filled from the side, the end of the discharge pipe or nozzle is totally submerged when the liquid level is 18 inches from the bottom of the tank. [in 102]~~

(21) “Standing Loss Control” – the control of vapors from aboveground storage tanks when no Phase I or Phase II gasoline transfers are occurring. [New to D6 – added definition to further define SLC suggested by CARB. Definition obtained from CARB’s D-200-Definitions for Vapor Recovery Procedures, amended May 2008]

(22) “Vacuum-Assist System” – A Phase II Vapor Recovery System that uses vacuum producing device such as a compressor or turbine to create a vacuum during Gasoline dispensing to capture Gasoline Vapors. [New to D3. Definition found in AVAQMD, Rule 461-Gasoline Transfer and Dispensing, 10/21/08]

(23) “Vapor Check Valve” is a valve that opens and closes the vapor passage to the storage tank to prevent Gasoline vapors from escaping when the nozzle is not in use. [New to D3. Definition obtained from SCAQMD Rule 461, 4/6/2012]

~~(7) “Vapor Recovery System” means aA system that is designed to collect or capture the vapors released and/or generated during the dispensing, transfer and/or storage of liquids, and is capable of storage, transferring and/or disposal of the recovered vapors. [in 102]~~

- (248) “Vapor Tight ~~(Fugitive Vapor Leak)~~” – means the detection of less than 10,000 ppm, as methane, using an appropriate hydrocarbon analyzer when sampling is performed according to the procedures specified in EPA Method 21. [New to D10, removed Fugitive Vapor Leak as it is defined seperatley in 102]

[New to D7 – Previous iterations of this draft had Vapor Tight stricken from this rule adding to 102, however after talks with EPA this should remain in the rule as detection limits could vary per rule.]

(C) Requirements

- (1) Gasoline Transfer i~~nto or From~~ Stationary Storage Tanks and Delivery Systems Mobile Fuelers (Phase I) [Language updated based on AVAQMD Rule 461, 10/28/2008 & SCAQMD Rule 461, 4/6/2012]

A person shall not transfer, permit the transfer or provide equipment for the transfer of Ggasoline into ~~or from~~ any ~~tank truck, trailer, or railroad tank car into~~ any stationary storage ~~container tank~~ with a capacity of more than 251 gallons (950 liters ~~(251 gallons)~~), or any Mobile Fueler tank with a capacity of more than 120 gallons (454 liters) unless the transfer is made to a storage ~~container tank~~ equipped as required in Rule 463 or unless all of the following conditions are met: [tank types outlined in purpose/applicability statement. Mobile Fueler reference found in AVAQMD Rule 461, 10/28/2008 & SCAQMD Rule 461, 4/6/2012]

- (a) The ~~container tank~~ is equipped with a permanent CARB Certified Ssubmerged Fill pipe, ~~and~~ [updated based on language from the AVAQMD Rule 461, 10/28/2008]
- (b) The vent pipe opening is equipped with a CARB Certified Pressure/Vacuum Relief Valve. [updated based on language from the AVAQMD Rule 461, 10/28/2008]
- (~~c~~) Such The delivery vessel or container tank is equipped with a CARB Certified Vapor Recovery System ~~which has been certified by the California Air Resources Board, and the facility's vapor recovery system shall be~~ capable of recovering or processing 98 percent (9598%) of the displaced Ggasoline Vapors, ~~and~~ [clarity] [New to D6 – per EPA recommendation, removing delivery vessel]
- (d) The Mobile Fueler is equipped with a CARB Certified Vapor Recovery System capable of recovering or processing 95 percent (95%) of the displaced Gasoline Vapors. [New to D6 – at EPA suggestion, section added to specifically address mobile fuelers per South Coast Rule 461 section (c)(1)(C) and SCAQMD Rule 448 section 301.3]
- (~~e~~) All vapor return lines are shall be connected between the tank truck, trailer, or railroad tank car and the stationary storage containerthe tanks involved in the transfer, and the vapor recovery system is in operation in accordance with the manufacturer's specifications, and In addition, the

~~delivery vehicle, including all associated hoses, fittings, and couplings;~~
~~is couplings shall be~~ maintained in a Liquid Tight and vapor-tight Vapor Tight condition, as defined by the applicable ~~California Air Resources Board~~ CARB Certification and test procedures ~~as referenced in (Section~~ (G) of this rule; ~~and all equipment is operated and maintained according to the manufacturer's specifications. [clarity – manufactures specs outlined in “Additional Requirements” of this rule]~~

- (~~fe~~) The hatch on any tank truck, trailer, or railroad tank car shall not be opened for more than three (3) minutes for each visual inspection, provided that:
- (i) Transfer or pumping has been stopped for at least three (3) minutes prior to opening.
- (ii) The hatch is closed before transfer or pumping is resumed.
[Updated based on language from the AVAQMD Rule 461, 10/28/2008]

~~Hatch openings are limited to no more than 3 minutes in duration for visual inspection, provided that pumping has been stopped for at least 3 minutes prior to opening, and the hatch is closed fully before pumping is resumed.~~

- (~~ge~~) ~~Except for above-ground tanks, all lines~~ Underground tank lines shall be ~~are~~ gravity ~~drained, drained;~~ in such a manner that upon disconnect no liquid spillage would ~~be expected occur.~~
- (~~hf~~) Above-ground storage tanks shall be equipped with ~~d~~ Dry B breaks, such that liquid spillage upon disconnect shall not exceed 10 milliliters; ~~and.~~
- (~~gi~~) Equipment subject to this section ~~is shall be~~ operated and maintained, ~~with no defects, as follows~~ according to all of the following requirements:-
- (i) All fill tubes ~~are shall be~~ equipped with Vapor Tight vapor-tight covers, including gaskets; ~~and~~
- (ii) All ~~D~~ Dry B breaks ~~have shall be~~ equipped with vapor-tight Vapor Tight seals and ~~are equipped with vapor-tight covers or dust covers; and~~
- (iii) Coaxial fill tubes ~~are shall be~~ operated and maintained so that there is no obstruction of vapor passage from ~~the storage tank back to the delivery vehicle any portion of the Vapor Recovery System;~~ ~~and~~
- (iv) The fill tube assembly, including fill tube, fittings and gaskets; ~~is shall be~~ maintained to prevent vapor leakage from any portion of the Vapor Recovery System; ~~and,~~
- (v) All storage tank or Mobile Fueler vapor return pipes-lines without ~~D~~ Dry B breaks ~~are shall be~~ equipped with vapor-tight Vapor Tight covers, including gaskets.

- (j) Aboveground storage tanks subject to Phase I requirements must also comply with Standing Loss Control requirements as specified in the applicable CARB Executive Orders. [New to D6 – suggested addition from CARB]
- (k) Any time an underground storage tank is installed or replaced at any Gasoline Transfer and Dispensing Facility, a CARB Certified Spill Box shall be installed.
- (l) A person shall not install or permit the installation of any Phase I Vapor Recovery System of the coaxial design at any Gasoline Transfer and Dispensing Facility unless such system was certified by CARB after January 1, 1994; and
- (m) A person shall not install or permit the installation of any Phase I Vapor Recovery System of the dual-point design at any Gasoline Transfer and Dispensing Facility unless such system incorporates CARB Certified Poppetted Dry Breaks or spring-loaded Vapor Check Valves on the vapor return coupler.
- (n) The Owner/Operator of a new or Altered Gasoline Transfer and Dispensing Facility, involving exposure of underground storage tank and associated piping, shall have all underground storage tank installation and associated piping configuration inspected prior to any Backfilling to verify that all underground equipment is properly installed in accordance with the requirements specified in the applicable CARB Executive Order. The District shall be notified by telephone at least 24 hours prior to the Backfilling. [Language (h)-(o) obtained from AVAQMD Rule 461, 10/28/2008]

(2) Gasoline Transfer ~~i~~Into Vehicle Fuel Tanks (Phase II)

A person shall not transfer, or permit the transfer or provide equipment for the transfer of ~~G~~gasoline from a stationary storage ~~container-tank or Mobile Fueler of greater than 120 gallons (454 liters) capacity, into any Mobile Fueler of greater than 120 gallons (454 liters) capacity or into any Motor Vehicle fuel tank of greater than 5 gallons (19 liters) capacity unless all of the following conditions are met:~~subject to the provisions of Section (C)(1), or from a storage container to which gasoline has been transferred from another container subject to the provisions of Section(C)(1), into any motor vehicle tank of greater than 19 liters (5-gallons) capacity unless: [updated capacity information from AVAQMD Rule 461, 10/28/2008]

- (a) The dispensing unit used to transfer the ~~G~~gasoline from the stationary storage ~~container-tank or Mobile Fueler~~ to the ~~M~~motor ~~V~~vehicle fuel tank is equipped with a CARB Certified Vvapor Rrecovery Ssystem ~~which has been certified by the California Air Resources Board as~~ capable of recovering 95 percent (95%) of the displaced ~~G~~gasoline ~~V~~vapors, or having an emission factor not exceeding 0.38 pounds per 1,000 gallons; and.[emission factor added from SCAQMD, Rule 461, 4/6/2012]
- ~~(b) The vapor recovery system is operating in accordance with the manufacturer's specifications; and~~ [removed reference here and added to

additional requirements so that it could be applicable to both Phase I and Phase II]

- (b) The system and associated components shall be maintained Vapor Tight and Liquid Tight at all times.
- (c) ~~Equipment subject to this rule is operated and maintained with none of the following defects, pursuant to the definitions in California Administrative Code Section 94006, Subchapter 8, Chapter 1, Part III, of Title 17:~~
[removed reference here and added to additional requirements so that it could be applicable to both Phase I and Phase II]
- (i) ~~Torn or cut boots;~~
- (ii) ~~Torn or cut face seals or face cones;~~
- (iii) ~~Loose or broken retractors;~~
- (iv) ~~Boots clamped or otherwise held in an open position;~~
- (v) ~~Leaking nozzles;~~
- (vi) ~~Loose, missing, or disconnected nozzle components, including but not limited to boots, face seals, face cones, check valve wires, diaphragm covers and latching devices;~~
- (vii) ~~Defective shutoff mechanisms;~~
- (viii) ~~Loose, missing, or disconnected vapor fuel hoses and associated components including but not limited to flow restrictors, swivels and anti-recirculation valves;~~
- (ix) ~~Crimped, cut, severed, or otherwise damaged vapor or fuel hoses;~~
- (x) ~~Missing, turned off, or otherwise not operating assist type vapor recovery systems, or any components of such systems;~~
- (xi) ~~Improper or non-"CARB certified" equipment or components;~~
- (xii) ~~Inoperative, severely malfunctioning or missing vacuum producing device;~~
- (xiii) ~~Inoperative, loose, missing or disconnected pressure/vacuum relief valves, vapor check valves or dry breaks. [removed listed deficiencies instead referencing the VRED in Additional Requirements section.]~~

- (c) Each Balance-System nozzle is equipped with a CARB Certified Insertion Interlock Mechanism and a CARB Certified Vapor Check Valve which shall be located in the nozzle.
- (d) Each Gasoline-dispensing nozzle is equipped with a coaxial hose as specified in the applicable CARB Executive Order.
- (e) Dispensing nozzles shall be equipped with CARB Certified hold-open latches unless prohibited by local fire code and/or State Fire Marshall.
- (f) Unless otherwise specified in the applicable CARB Executive Orders, all Liquid Removal devices installed for any Gasoline dispensing nozzle with a dispensing rate of greater than five gallons per minute shall be CARB Certified with a minimum Liquid Removal rate of five milliliters per gallon transferred.
- (g) The breakaway coupling shall be CARB Certified. Any breakaway coupling shall be equipped with a poppet valve, which shall close and maintain both the Gasoline Vapor and liquid lines Vapor Tight and Liquid Tight when the coupling is separated. In the event of a separation due to a “drive-off”, the Owner/Operator shall complete one of the following and document the activities pursuant to section (E) of this rule, for recordkeeping requirements:
 - (i) Conduct a visual inspection of the affected equipment and perform qualified repairs on any damaged components before placing any affected equipment back in service. In addition, the affected equipment shall be tested in accordance to applicable test methods as specified in the applicable CARB Executive Orders and the corresponding CARB approved Installation, Operation and Maintenance manual and successfully passed prior to the affected equipment dispensing Gasoline into any Vehicle; or
 - (ii) Conduct a visual inspection of the affected equipment and replace the affected nozzles, coaxial hoses, breakaway couplings, and any other damaged components with new or certified rebuilt components that are CARB Certified, before placing any affected equipment back in service. [(d)-(g)updated from SCAQMD, Rule 461, 4/6/2012]

(3) Other Additional Activities & Equipment Requirements

- (a) Equipment subject to this rule is operated and maintained with none of the defects listed in California Code of Regulations, Section 94006, Subchapter 8, Chapter 1, Part III of Title 17, as specified in the most recently adopted CARB “Vapor Recovery Equipment Defects List” (<https://www.arb.ca.gov/vapor/vred/vred.htm>).

- (b) A person shall not supply, offer for sale, sell or install or allow the installation of any Vapor Recovery System or any of its components, unless the system and component are CARB Certified. Each Vapor Recovery System and its components shall be clearly and permanently marked with the qualified manufacturer's name and model number as certified by CARB. In addition, the qualified manufacturer's unique serial number for each component shall also be clearly and permanently marked for the dispensing nozzles. Any qualified manufacturer who Rebuilds a component shall also clearly and permanently mark the corresponding information on the component [Language from AVAQMD Rule 461, 10/28/2008]
- (ca) Newly installed Vapor Recovery Systems shall install CARB Certified equipment pursuant to the latest applicable Executive Order used to comply with the provisions of this rule shall:
- ~~(i) Be limited to those systems certified by the Air Resources Board as the latest generation equipment at the time the installation is initiated, and~~
 - ~~(ii) Utilize only equipment identified by the Air Resources Board as achieving the highest reliability and maintainability compatible with the certified system selected for installation.~~
 - ~~(iii) Utilizing dispensing nozzles equipped with a hold-open latch unless the local fire code prohibits the use of the hold-open latch.~~
- ~~(b)d)~~ Vapor processing or vapor Recovery Systems used to comply with the provisions of this rule shall comply with all safety, fire, weights and measures, and other applicable codes and/or regulations.
- ~~(c)~~ A person shall not offer for sale, sell or install within the district any new or rebuilt vapor recovery equipment unless the components and parts clearly identify by markings the certified manufacturing company and/or certified rebuilding company. [provisions outlined in section (C)(3)(b) of this rule.]
- (ed) Vapor Recovery Systems required under Section (C)(1) or Section (C)(2) shall at all times be operated and maintained in accordance with the manufacturer's specifications and the State's certification.
- (fe) When ~~problems deficiencies are or defects are~~ detected and are associated with any vapor recovery, storage, ~~or~~ delivery vessel or dispensing equipment, ~~other than a breakdown of the central vapor incineration or processing unit, the equipment, the Owner/Operator~~ shall at the End of Cycle end of the cycle remove the equipment from service and not use the equipment until it has been repaired, replaced or adjusted as necessary required to remove the problem or defect to comply with the provisions of this rule and applicable Executive Order(s). [clarity]
- As applied to this subsection, the term "end of the cycle" means:

- ~~(i) for delivery vehicles when the delivery vehicle is emptied or, if not emptied, before taking on more gasoline.~~
- ~~(ii) for transferring gasoline to a motor vehicle is at the time the problem is detected, or at the end of refueling the current vehicle
[moved to the definition section of this rule]~~
- ~~=~~
- (gf) A person shall not perform or permit ~~the a~~ "pump-out" (bulk transfer) of ~~G~~gasoline from a storage ~~container tank~~ subject to Section (C)(1) unless such bulk transfer is performed using a ~~V~~vapor ~~R~~ecovery ~~S~~-system capable of returning the displaced vapors from the delivery vessel or other ~~container tank~~ being filled back to the stationary storage ~~containertank~~. ~~This vapor recovery is not required where the container is to be removed or filled with water for testing. For visual inspections, the requirements of Subsection (C)(1)(d) are applicable. [Removed. Provisions not included in SCAQMD 461, AVAQMD 461, Yolo-Solano 2.22, or Sac Metro 449]~~
- (hg) A person shall not store, or allow the storage of, ~~g~~Gasoline in any stationary storage ~~container tank~~ with a capacity of more than 251 gallons (950 liters ~~(251 gallons)~~) unless such ~~containertank~~:
 - (i) Complies with Rule 463; or
 - (ii) Is equipped with a Phase I Vapor Recovery System.~~permanent submerged fill pipe and a certified vapor recovery system.~~
- (ih) The Owner/Operator of each any Gasoline Transfer and Dispensing Facility subject to Section (C)(2) above shall conspicuously post District-required signs specified in Attachment A of this rule in the immediate Gasoline dispensing area. ~~in the gasoline dispensing area the operating instructions, the district's toll-free telephone number for complaints and a District-specified warning sign. [Language updated for clarity obtained from AVAQMD Rule 461, 10/28/2008 and SCAQMD Rule 461, 4/6/2012]~~
- ~~(j) A fueling dispenser must be clearly labeled if it is not intended to be used to fuel Motor Vehicles. [Language updated for clarity obtained from AVAQMD Rule 461, 10/28/2008]~~
- ~~(k) Gasoline shall not be stored in open container(s) of any size or handled in any manner (spillage, spraying, etc.) that permits Gasoline or Gasoline Vapors to enter the atmosphere, contaminate the ground, groundwater, stormwater or the sewer systems. [New to D6 – per EPA suggestion, moved from (C)(1)]~~
- ~~(l) The Owner/Operator of a new or Altered Gasoline Transfer and Dispensing Facility shall have all Phase I and Phase II Vapor Recovery Systems inspected upon completion of the construction to verify that all components were installed in accordance with the description specified in the Authority to Construct and in compliance with all District requirements. The District shall be notified in writing of any changes to the information and specifications submitted with the application under~~

which the Authority to Construct was issued. [New to D6 – per EPA suggestion, moved from (C)(1)]

- (m) The failure of an Owner/Operator of any Gasoline Transfer and Dispensing Facility to meet any requirements of section (C) of this rule shall constitute a violation. Such non-compliant equipment shall be tagged "Out of Order." [New to D6 – per EPA suggestion, moved from (C)(1)]
- (n) Except during repair activity, the "Out of Order" tag specified in subsection (C)(3)(m) shall not be removed and the non-compliant equipment shall not be used, permitted to be used, or provided for use unless all of the following conditions are satisfied:
 - (i) The non-compliant equipment has been repaired, replaced, or adjusted, as necessary;
 - (ii) The Owner/Operator has notified the District of the repairs by completing, signing and submitting the form supplied by the District.
 - (iii) The non-compliant equipment has been reinspected and/or authorized for use by the District. [New to D8 – per EPA recommendation (C)(3)(n) moved from Section (C)(1) in revision D7 to (C)(4) and then to (C)(3) in revision D8.]

(4) Self-Compliance Program Requirements

The Owner/Operator of any Retail Gasoline Transfer and Dispensing Facility shall implement a self-compliance program as follows:

- (a) The self-compliance program shall include the following elements:
 - (i) Weekly maintenance inspections shall be conducted in accordance with the protocol specified in Attachment B to ensure proper operating conditions of all components of the Vapor Recovery Systems.
 - (ii) Periodic compliance inspections shall be conducted at least once every twelve months and in accordance with the protocol specified in Attachment C to verify the compliance with all applicable District rules and regulations, as well as all permit conditions.
 - (iii) Maintenance schedules consistent with the applicable Phase I and Phase II Vapor Recovery Systems and components installed at the Gasoline Transfer and Dispensing Facility.
 - (iv) An employee training program including the following:
 - a. Itemized training procedures for employees responsible for conducting any part of the self-compliance program.

- b. A training schedule to periodically train any employee responsible for conducting any part of the self-compliance program.
 - c. A record for each employee of the dates of training provided and the next training date.
 - d. A procedure to review and establish any additional necessary training following any changes or updates to the CARB Executive Order for the installed Vapor Recovery System.
- (b) Any equipment with Major Defect(s) which are identified during the weekly maintenance inspections or periodic compliance inspections shall be removed from service, repaired, brought into compliance, and duly entered into the repair logs required under section (E) of this rule, for record keeping, before being returned to service.
- (d) Defects discovered during self-inspection and repair shall not constitute a violation of Rule 461. [New Section based on AVAQMD Rule 461 10/28/2008]

(D) Exemptions

- (1) The provisions of this rule shall not apply to the transfer of Ggasoline:
- (a) Into or from any stationary storage ~~container-tank~~ of less than 550 gallons capacity, which is used for the fueling of implements of husbandry as such Vehicles are defined in Division 16 (Section 36000 et. seq.) of the California Vehicle Code, if such ~~container-tank~~ is equipped with a permanent Submerged Fill Pipe.
 - (b) Into or from any underground stationary ~~container-tank~~ using only hand pumping, for the purpose of providing emergency services during loss of commercial power, where the ~~district Air Pollution Control Officer~~ (APCO) has certified that such pumping cannot comply with the provisions of Section (C)(2) and where such hand pumping capability is otherwise required by law or regulation.
 - (c) Into or from any stationary storage ~~container-tank~~ of any Retail Ggasoline Station installed prior to December 19, 1988 which meets all the following conditions:
 - (i) The monthly Ggasoline Throughput of the Facility does not exceed 10,000 gallons and the annual Ggasoline Throughput of the Facility does not exceed 60,000 gallons, on a calendar month and calendar year basis, respectively, beginning with 1988 ~~and;~~
 - (ii) The Facility has not been modified after December 19, 1988 where modified means the installation of a new tank, replacement

- of any existing tank, and/or excavation (exposing) of 50 percent (50%) or more of a Ffacility's total underground liquid piping from the stationary storage tanks to the Ggasoline dispensers, ~~and;~~
- (iii) The transfer of Ggasoline from any delivery Vvehicle into those stationary storage ~~containers~~ tanks with a capacity of more than 251 gallons (950 liters ~~(251 gallons)~~) is limited to those ~~containers~~ tanks which are equipped with permanent Submerged Fill Pipes, ~~and~~
 - (iv) All dispensing nozzles are equipped with a hold-open latch unless the local fire ~~code, or State Fire Marshal code~~ prohibits the use of the hold-open latch, ~~and;~~
 - (v) The Ffacility Owner/Operator provides adequate evidence
 - (a) That compliance would be economically prohibitive and the alternative would be closure of the Ffacility, ~~and~~
 - (b) That the Ffacility provides essential emergency fueling for Motor Vehicles and closure would result in a lessening of public safety, ~~and~~
 - (c) That no other non-exempt retail Ffacility open during reasonable hours exists within a driving distance of 5 miles, ~~and~~
 - (vi) The Owner/Operator receives written approval from the ~~d~~District APCO in response to a formal request for exemption. Such exemptions shall be based solely on the evidence demonstrating the validity of the conditions listed above. If during any calendar month thereafter the Ggasoline throughput exceeds 10,000 gallons, the exemption shall cease, effective the first day of the following calendar month. If during any calendar year thereafter the gGasoline throughput exceeds 60,000 gallons, the exemption shall cease, effective the first day of the following calendar year.

(2) Existing facilities that no longer meet exemption criteria shall:

- (a) Secure an Authority to Construct from the District prior to the commencement of modifications.
- (b) Secure all other permits and approvals as required.
- (c) Assure compliance with Sections (C)(1) and (C)(2) at the time Gasoline is first received or dispensed from the Facility.

~~(2) — Any Ffacility classified as exempt or claiming to be exempt pursuant to this section shall meet the same record keeping requirements as expressed in Section (E) of this rule so as to be able to prove the claimed exempt status. [moved to (E)(3)]~~

(3) The requirements of (C)(2) shall not apply to dedicated, non-public accessible, fuel dispensing equipment serving Vehicle fleets where 95 percent (95%) of the fleet Vehicles are equipped with Onboard Refueling Vapor Recovery (ORVR) systems. To qualify for this exemption, the fleet Operator must also own the Gasoline Transfer and Dispensing operation that services the Vehicle fleet, and maintain records as outlined in (E)(3)(6) supporting ORVR fleet exemption.

(a) Prior to operating under the exemption in Section (D3), Owner/Operator shall obtain a valid Authority to Construct or Permit to Operate allowing such operations. [(D)(3) exemption from AVAQMD, Rule 461, 10/28/2008]

(4) Any Facility classified as exempt or claiming to be exempt pursuant to this section shall meet the same record keeping requirements as expressed in Section (E) of this rule so as to be able to prove the claimed exempt status.

~~(E) Record Keeping and Reporting~~

~~(1) The owner or operator shall maintain a log of all inspections, repairs, and maintenance on equipment subject to this rule.~~

~~(2) The owner or operator of a facility exempt under Subsections (D)(1)(a) or (D)(1)(d), in order to determine the exemption, shall prepare a log showing the monthly throughput and a summary of the throughput for the calendar year to date. Therefore, a facility exempt under Subsection (D)(1)(a) must also show the throughput used to refuel implements of husbandry.~~

~~(3) A daily log of product throughput shall be maintained by each facility.~~

~~(4) All required records and logs shall be maintained at the facility for at least two (2) years and shall be made available to the APCO upon request. [All aspects of this section covered under new recordkeeping section below]~~

(E) Recordkeeping

A person who performs the installation of components, self-compliance inspections, repairs or testing at any Gasoline Transfer and Dispensing Facility, including, but not limited to, the activities for normal operation and maintenance, Performance Testing, Re-Verification Testing and those following a drive-off, shall provide to the Owner/Operator all records listed below, as applicable, at the end of each day when the service is provided. The Owner/Operator of any Retail or non-retail Gasoline Dispensing Facility shall maintain all records listed below and any other test results or maintenance records that are required to demonstrate compliance on site for a period of at least two (2) years (or five (5) years for Title V facilities). Notwithstanding, records for non-retail Gasoline Dispensing Facilities that are unmanned may be kept at other locations approved by the APCO. All records shall be made available to the APCO upon request both on site during inspections and offsite as specified.

- (1) Records of all components installed, defective components identified or repaired during self-compliance inspections.
- (2) Repair logs, which shall include:
 - (a) Date and time of each repair.
 - (b) The name of the person(s) who performed the repair, and, if applicable, the name, address and phone number of the person's employer.
 - (c) Description of service performed.
 - (d) Each component that was installed, repaired, serviced, or removed, including the required component identification information pursuant to subsection (C)(3)(b).
 - (e) Each component that was installed as replacement, if applicable, including the required component identification information pursuant to subsection (C)(3)(b).
 - (f) Receipts for parts used in the repair and, if applicable, work orders, which shall include the name and signature of the person responsible for performing the repairs.
- (3) Records of tests, which shall include:
 - (a) Date and time of each test.
 - (b) Name, affiliation, address and phone number of the person(s) who performed the test.
 - (c) Test data and calibration data for all equipment used.
 - (d) Date and time each test is completed and the Facility Owner/Operator is notified of the results. For a test that fails, a description of the reasons for the test failure shall also be included.
 - (e) For a re-test following a failed performance or reverification test, description of repairs performed pursuant to subsection (F)(1) and (F)(2).
 - (f) Copies of test reports in District approved format.
- (4) Monthly Gasoline throughput records.
- (5) Records to prove that the installer/contractor that installed or altered the Enhanced Vapor Recovery (EVR) equipment has successfully completed a manufacturer training program and any relevant state certification program applicable to the Phase I and Phase II Enhanced Vapor Recovery systems and associated components as specified in subsection (C)(3)(b).

- (6) Recordkeeping for Exempt Fleets An Owner/Operator claiming exemption under Section (D)(3) shall keep a record of the make, model, model year, and Vehicle identification number of all Vehicles refueled at the Gasoline dispensing Facility. These records shall be maintained on the premises for at least two (2) calendar years. [Recordkeeping (section (E)) added from language present in AVAQMD, Rule 461, 10/28/2008]

(F) Performance Testing and Re-Verification Requirements

- (1) Within 60 calendar days or after dispensing the first 60,000 gallons of fuel into a Mobile Fueler or a Vehicle fuel tank, the Owner/Operator of a new or Altered Gasoline Transfer and Dispensing Facility shall conduct and successfully pass the Performance Tests in accordance with the test methods referenced in applicable CARB Executive Orders as specified in section (G), as well as any additional tests required by District Permits, to verify the proper installation and operation of Phase I and Phase II Vapor Recovery Systems. Test results shall be submitted as stated in subsections (F)(3)(d) and (F)(3)(e). [New to D6 – Per EPA suggestion to reduce required time to conduct testing, changed days from 90 to 60 for amount of time after opening to conduct test. 60 days is also what is required in EO. Section language also updated to reflect CARB executive order instead of listed tests in section (G)]
- (2) The Owner/Operator shall conduct and successfully pass the Re-Verification Tests in accordance with the test methods referenced in section (G), and any additional tests required by the applicable CARB Executive Orders or District Permits, to verify the proper operation of the Vapor Recovery Systems. Test results shall be submitted as stated in subsections (F)(3)(d) and (F)(3)(e).
- (a) The Re-Verification Tests at Retail and Non-Retail Gasoline Transfer and Dispensing Facilities shall be conducted annually.
- (b) Re-Verification Testing shall be conducted no later than the last day of the same month the testing occurred in the prior year. When a new Performance Test schedule is required due to a Facility alteration, new Re-Verification Testing months shall be established based on the date of the Performance Tests. [New to D6 – first sentence updated per District Compliance recommendation – no later than, instead of same month each year]
- (c) In case of a change of Owner/Operator, the new Owner/Operator shall conduct the next Re-Verification Test on the same testing month as established by the previous Owner/Operator, if the previous Re-Verification Testing records are available. When no testing records are available, the new Owner/Operator shall complete all the applicable Re-Verification Testing within 60 calendar days of the change of Owner/Operator. [New to D6 - Per EPA suggestion, changed testing requirement from 90 to 60 days]

- (3) A person who conducts performance or Re-Verification Tests shall comply with all of the following:
- (a) Conduct performance or Re-Verification Tests in accordance with the applicable test methods referenced in section (G) and other CARB testing procedures. Tests shall be conducted using calibrated equipment meeting the calibration range and calibration intervals specified by the manufacturer.
 - (b) Notify the District at least ten calendar days prior to testing. In the event that a Performance Test or Re-Verification Test cannot be conducted at the scheduled date and time, the test may be rescheduled to a later date and time provided that the District is notified at least 24 hours prior to the originally scheduled time. All notification under this subsection shall be provided by District approved methods.
 - (c) Conduct performance and Re-Verification Tests during normal District business hours. The APCO may approve alternative testing.
 - (d) Submit a copy of the PASS/FAIL test results in a District approved format to the APCO within 30 calendar days after each test is conducted. The PASS/FAIL test results are a summary of the overall results of each test.
 - (e) Submit the final test report demonstrating compliance within 30 calendar days of the date when all tests were passed. The test report shall include all the required records of all tests performed, test data, current MDAQMD Facility ID number of the location being tested, the equipment Permit to Operate or Application number and, a statement whether the system or component tested meets the required standards.
- (4) The Owner/Operator shall not operate or resume operation of a Gasoline Transfer and Dispensing Facility, unless the Facility has successfully passed the applicable performance or Re-Verification Tests. Notwithstanding the above, when a dispenser associated with any equipment that has failed a Re-Verification Test is isolated and shut down, the Owner/Operator may continue operation or resume operation of the remaining equipment at the Facility, provided that test results demonstrate that the remaining equipment is in good operating condition. All test results and the method of isolating the defective equipment shall be documented in the test reports to be submitted to the APCO pursuant to subsection (F)(3)(c)-(e). [Section F language taken from AVAQMD, Rule 461, 10/28/2008]

~~(F) — Compliance Schedule~~

- ~~(1) — Existing facilities which were exempted by Subsection (D)(1)(a):~~
- ~~(a) — The owner or operator of any stationary storage container which was exempt by Subsection (D)(1)(a) and which is modified on or after December 19, 1988 shall comply with this rule in accordance with the following schedule:~~

- ~~(i) — Secure an Authority to Construct from the district prior to the commencement of modifications.~~
- ~~(ii) — Secure all other permits and approvals as required. [Section (E)(1)(a) covered under section (D)(1)(vi)]~~
- ~~(iii) — Assure compliance with Sections (C)(1) and (C)(2) at the time gasoline is first received or dispensed from the facility. [moved to Exemption section.]~~
- ~~(b) — The owner or operator of any stationary storage container which was exempt by Subsection (D)(4) and which is no longer exempt, shall comply with this rule in accordance with the following schedule:~~
 - ~~(i) — Secure an Authority to Construct from the district by March 31 of the year of the loss of the exemption and before the commencement of modifications.~~
 - ~~(ii) — Secure all other permits and approvals as required.~~
 - ~~(iii) — Commence construction by September 30 of the year of the loss of the exemption.~~
- ~~(iv) — Assure compliance with Sections (C)(1) and (C)(2) by December 30 of the year of the loss of the exemption. [D)(4) Does not exist in '94 version nor this update. Not sure what it originally referred to.]~~

(G) Test Methods ~~f~~For Compliance Verification

When more than one test method is specified, a violation of any one test is a violation of the rule. ~~[New to D6 –added per suggestion from EPA]~~

- (1) All required tests shall be conducted in accordance with the most recently CARB approved version of CARB test methods or as stated in the applicable CARB Executive Orders including the corresponding Installation, Operation and Maintenance Manual test procedures or any other test methods approved in writing by the USEPA, CARB, and the District.

~~[New to D9 – Testing Language updated based on South Coast Language (Rule 461 – Gasoline Transfer and Dispensing (April 6th, 2012) referring to the CARB executive orders and other approved methods for testing.]~~

~~[New to D7 – More detail in testing language, updated based on San Diego County APCD (SDAPCD) Rule 61.4 – Transfer of Volatile Organic Compounds into Vehicle Fuel Tanks (03/26/08)...~~

~~[New to D6 – CARB suggested referring only to the CARB Executive Orders for current list of required tests.]~~

~~A violation determined by any one of these test methods shall constitute a violation of the rule.~~

- ~~(1) Vapor Tightness (Fugitive Vapor Leaks) for all equipment described in Section (C) shall be determined by EPA Method 21—Determination of Volatile Organic Compounds Leaks.~~
- ~~(2) Vapor Recovery System Efficiency for Delivery Vessels shall be determined by the EPA Method entitled Control of Organic Compound Leaks from Gasoline Tank Trucks and Vapor Collection Systems (method specified in the CTG-EPA-450/2-78-051), or the CARB Method entitled, "Certification and Test Procedures for Vapor Recovery Systems of Gasoline Delivery Tanks".~~
- ~~(3) Reid Vapor Pressure shall be determined in accordance with ASTM Method D 323-82.~~
- ~~(4) Vapor Recovery System Efficiency for Bulk Plants shall be determined by CARB Method 202, "Certification of Vapor Recovery Systems—Bulk Plants".~~
- ~~(5) Vapor Recovery System Efficiency for Terminals shall be determined by CARB Method 203, "Certification of Vapor Recovery Systems—Gasoline Terminals".~~
- ~~(6) Vapor Recovery System Efficiency for Service Stations shall be determined by the CARB Methods in "Test Procedures for Determining the Efficiency of Gasoline Vapor Recovery Systems at Service Stations".~~

See SIP Table at <http://www.mdaqmd.ca.gov/Modules/ShowDocument.aspx?documentid=45>

[SIP: ~~Approved 5/3/95, 60 FR 21702, 40 CFR 52.220(e)(198)(I)(E)(1); Approved 6/9/82, 47 FR 25013, 40 CFR 52.220(e)(85)(v)(A); Approved 12/21/78, 43 FR 59489, 40 CFR 52.220(e)(42)(xiii)(A); Approved 7/26/77, 42 FR 37976, 40 CFR 52.220(e)(35)(ii) and 40 CFR 52.220(e)(31)(vi)(A)]~~

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ATTACHMENT A

MDAQMD-REQUIRED SIGNS

(A) The Operator shall post the following signs:

- (1) "NOZZLE" operating instructions;
- (2) Mojave Desert AQMD's" toll-free telephone number (800) 635-4617; and
- (3) A "warning" stating:

TOXIC RISK

FOR YOUR OWN PROTECTION DO NOT BREATHE FUMES

DO NOT TOP OFF TANKS"

(B) All required signs shall conform to all of the following:

- (1) For decal signs:
 - (a) Each sign shall be visible from all Fueling Positions it serves; and
 - (b) Sign shall be readable from a distance of 3 feet.
- (2) All other signs:
 - (a) For pump toppers, one double-back sign per island;
 - (b) For permanent (non-decal) signs, two single-sided or one double-sided sign(s) per two (2) dispensers; and
 - (c) All signs shall be readable from a distance of 6 feet

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ATTACHMENT B

MAINTENANCE INSPECTION PROTOCOL

The Owner/Operator of a Retail Gasoline Transfer and Dispensing Facility shall at minimum verify the following during required maintenance inspections:

(A) PHASE II VAPOR RECOVERY SYSTEM INSPECTION

- (1) The fueling instructions are clearly displayed with the appropriate toll-free complaint phone number and toxic warning signs.
- (2) The following nozzle components are in place and in good condition, as specified in CARB Executive Orders:
 - (a) faceplate/facecone; vapor splash guard/fill guard/efficiency compliance device (ECD)/VEG
 - (b) bellows
 - (c) latching device spring
 - (d) Vapor Check Valve
 - (e) spout (proper diameter/vapor collection holes)
 - (f) Insertion Interlock Mechanism
 - (g) automatic shut-off mechanism
 - (h) hold open latch
- (3) The hoses are not torn, flattened or crimped.
- (4) For Vacuum-Assist Systems, the vapor processing unit and burner are functioning properly. *[New to D6 – at the suggestion of District Compliance staff, removed Phase I self-inspection requirements]*

(B) RECORDS OF DEFECTIVE COMPONENTS

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ATTACHMENT C

PERIODIC COMPLIANCE INSPECTION PROTOCOL

The Owner/Operator of a Retail Gasoline Transfer and Dispensing Facility shall at minimum verify the following during the periodic compliance inspections:

(A) GENERAL INSPECTION

- (1) The District permit is current.
- (2) The equipment and District permit description match.
- (3) The Facility complies with all permit conditions.
- (4) The required sign is properly posted and the sign contains all the necessary information (i.e., toll-free complaint phone number, toxic warning sign, etc.).

(B) PHASE I VAPOR RECOVERY SYSTEM INSPECTION

- (1) The spill container is clean and does not contain Gasoline.
- (2) The fill caps are not missing, damaged or loose.
- (3) If applicable:
 - (a) The spring-loaded Submerged Fill Tube seals properly against the coaxial fitting.
 - (b) The Dry Break (poppet valve) is not missing or damaged.
- (4) The Submerged Fill Tube is not missing or damaged.
- (5) The distance between the highest level of the discharge opening of the Submerged Fill Tube and the bottom of the stationary storage tank does not exceed six inches (6").
- (6) The Phase I Vapor Recovery System complies with required CARB certification and is properly installed.
- (7) The Spill Box complies with required CARB certification and is properly installed.
- (8) The vent pipes are equipped with CARB Certified Pressure/Vacuum Relief Valves.

(C) PHASE II VAPOR RECOVERY SYSTEM INSPECTION

- (1) The fueling instructions are clearly displayed.
- (2) Each nozzle is the current CARB-certified model.
- (3) Each nozzle is installed in accordance with the applicable CARB Executive Orders.
- (4) The following nozzle components are in place and in good condition, as specified in CARB Executive Orders or California Code of Regulations, Title 17, Part III, Chapter 1, subchapter 8, section 94006 or Health and Safety Code Section 41960.2 (e):
 - (a) faceplate/facecone; vapor splash guard/fill guard/efficiency compliance device (ECD)
 - (b) bellows
 - (c) latching device spring
 - (d) Vapor Check Valve
 - (e) spout (proper diameter/vapor collection holes)
 - (f) Insertion Interlock Mechanism
 - (g) automatic shut-off mechanism
 - (h) hold open latch
- (5) The hoses are not torn, flattened or crimped.
- (6) The vapor recovery hoses are the required size and length.
- (7) The hoses with retractors are adjusted to maintain a proper loop, and the bottom of the loop is within the distance from the island surface certified by the CARB Executive Order for that particular dispenser configuration.
- (8) The vapor recovery nozzles are equipped with required hoses.
- (9) The bellows-equipped vapor recovery nozzles are equipped with "CARB Certified" Insertion Interlock Mechanisms.
- (10) If required, the flow limiter is not missing and is installed properly.
- (11) The swivels are not missing, defective, or leaking, and the dispenser-end swivels, if applicable, are Fire-Marshall approved with 90-degree stops.

- (12) If required, the Liquid Removal Devices comply with required CARB certifications and are properly installed.
- (13) For Bellows-Less Nozzles, the hoses are inverted coaxial type except for Hirt systems, and the vapor collection holes are not obstructed.
- (14) For Vacuum-Assist Systems, the vapor processing unit and burner are functioning properly.
- (15) For Aspirator-Assist Systems, the major components (i.e. aspirator or jet pump, modulating valve, and Vapor Check Valve) are present inside each dispenser. For Aspirator-Assist Systems with certification-required calibration stickers, the current calibration sticker is present.

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RULE 462

Organic Liquid Loading

(A) General Description

(1) Purpose:

(a) ~~The purpose of this rule is to~~ To limit control the emissions of V~~olatile~~ Organic C~~ompounds~~ (VOC) and toxic compounds (such as benzene) from facilities that transport and load organic liquids into tanks, including Motor Vehicle fuel tanks, tank trucks, trailers or railroad tank cars. Organic Liquid Loading (any organic liquid, including gasoline), and in conjunction with Rules 461 and 463, limit the emissions from the storage, transfer, and dispensing of organic liquids. [Reorganized purpose and applicability in an effort to streamline]

(2) Applicability:

(ab) ~~—The provisions of this rule shall apply to all Class “A” or “B” Facilities, Retail and non-retail service stations or any other facility where Organic Liquids are stored or transferred. This rule applies to the transport of organic liquids, including fuels such as gasoline, between facilities and the transfer of such organic liquids into tanks, including motor vehicle fuel tanks, tank trucks, trailers or railroad tank cars. Facilities subject to this rule include, but are not limited to, bulk facilities, retail and non-retail service stations or any other facility where organic liquids are stored or transferred. [Reorganized purpose and applicability in an effort to streamline]~~

(3) Severability:

(a) ~~If any portion of this rule shall be found to be unenforceable, such finding shall have no affect on the enforceability of the remaining portions of the rule, which shall continue to be in full force and effect. [New to D8 – added at the suggestion of District Counsel. Language obtained from MD Rule 463 – Organic Liquid Storage]~~

(B) Definitions

MDAQMD Rule 462

Organic Liquid Loading

D1: mm/dd/yyD11: 12/14/17

The definitions contained in District Rule 102 – Definition of Terms, shall apply unless a term is otherwise defined herein: For the purposes of this rule only, the following terms are defined.

- (1) ~~“Class A Facility” – is a~~Any Organic Liquid Loading Facility having a valid permit to operate and loading 5,000,000 gallons (18,925,000 liters ~~(5,000,000 gallons)~~) or more per year and/or 20,000 gallons (73,700 liters ~~(20,000 gallons)~~) or more on any day of Organic Liquids, with a True Vapor Pressure, determined at actual storage conditions, of 77.5 mm (1.5 psia) or greater into any tank truck, trailer, or railroad tank car.
- (2) ~~“Class B Facility” – is a~~Any Organic Liquid Loading Facility having a valid permit to operate and loading less than 5,000,000 gallons (18,925,000 liters ~~(5,000,000 gallons)~~) per year, with a True Vapor Pressure, determined at actual storage conditions, of 77.5 mm (1.5 psia) or greater into any tank truck, trailer, or railroad tank car.
- (3) ~~“Fugitive Liquid Leak” – means t~~The dripping of a liquid at a rate exceeding three (3) drops per minute. [in 102]
- (4) ~~“Gasoline” – means a~~Any organic liquid, including petroleum distillate and methanol, having a Reid Vapor Pressure of 200 mm Hg (3.9 pounds per square inch), or greater, and used as a motor vehicle fuel, or any fuel which is commonly or commercially known or sold as gasoline. [in 102]
- (5) ~~“Organic Liquid” – means a~~Any chemical compound of carbon, including organic materials, organic solvents and gasoline, which is in a liquid phase at ambient or storage conditions. [Move to 102]
- (6) ~~“Organic Materials” – means c~~Chemical compounds of carbon excluding: carbon monoxide, carbon dioxide, carbonic acid, metallic carbides, metallic carbonates and ammonium carbonate. [in 102]
- (7) ~~“Organic Solvents” – includes~~Includes diluents and thinners and are defined as organic materials which are liquids at standard conditions and which are used as dissolves, viscosity reducers or cleaning agents, except that such material exhibiting a boiling point higher than 104 oC (219oF) at 0.5 mm Hg absolute pressure or having an equivalent vapor pressure shall not be considered to be solvents unless exposed to temperatures exceeding 104oC (219oF). [in 102]
- (3) ~~Submerged Fill Loading – A type of Organic Liquid loading operation where the discharge opening is completely submerged when the liquid level above the bottom of the vessel is eight centimeters (3.2 inches) or higher. [definition obtained from AQAOQMD Rule 462 – Organic Liquid Loading, 6/9/1995] [moving draft definition to 102]~~
- (8) ~~“Switch Loading” – means a~~A transfer of organic liquids with a vapor pressure of less than 77.5 mm Hg (1.5 psia) under actual loading conditions into any tank

~~truck, trailer or railroad tank car that was previously loaded with an organic liquid with a vapor pressure of 77.5 mm Hg (1.5 psia) or greater. [in 102]~~

~~(9) “Throughput” means the mass or volume of material or substance that is handled, or processed by a system in a given time period, such as gallons per year, tons per hour, etc. [in 102]~~

~~(10) “Vapor Reduction Device” Methods of reduction include, but are not limited to, thermal destruction (incineration), and absorption, adsorption and condensation. [moving to 102]~~

~~(11) “Vapor Recovery System” means a system that is designed to collect or capture the vapors released and/or generated during the dispensing, transfer and/or storage of liquids, and is capable of returning the displaced vapors and air from the vessel being filled back to the stationary storage container (a balance system) and/or a vapor reduction device. The Vapor Recovery System shall have a vapor control efficiency of 95 percent, by weight, or better. [in 102]~~

~~(12) “Vapor Recovery System Efficiency” means the estimated efficiency of the air pollution control technology which is incorporated, by means of an enforceable permit condition(s), in the Authority To Construct (ATC) and/or the Permit To Operate (PTO) of an emissions unit or process. Emission reductions attributed to lowering throughput rates or curtailing operating hours shall not be considered in determining abatement efficiency. [moving to 102]~~

~~(13) “Vapor Tight (Fugitive Vapor Leak)” – means the detection of less than 10,000/3,000 ppm, as methane, using an appropriate hydrocarbon analyzer when sampling is performed according to the procedures specified in EPA Method 21.~~

~~*[New to D11 – using only Vapor Tight in this definition at the suggestion of EPA, based on Fugitive Vapor Leak already being defined in Rule 102.]*~~

~~*[New to D10 – per suggestion from EPA, removed Vapor Tight from the definition list. Fugitive Vapor Leak is used throughout this rule and defined in rule 102 with a 3,000 ppm limit.]*~~

~~*[New to D9 – Stricken from previous drafts in favor of maintaining in definition rule 102, however due to detection rates that can vary based on the rule/equipment in question, returning to the individual rule. Based on Yolo-Solano rule deemed as RACT, detectable limit reduced from 10,000 to 1,000. Based on discussions with EPA]*~~

(C) Requirements

(1) Loading Requirements at Class “A” Facility

- (a) ~~A person shall not load organic liquids having a true vapor pressure of 77.5 millimeters of mercury (1.5 psia) or greater under actual loading conditions into any tank truck, trailer, or railroad tank car from any Class~~

~~A facility unless the loading facility is equipped with a vapor recovery system. The vapor recovery system efficiency shall be verified pursuant to methods listed in Section (F) of this rule. Each Class A Facility loading Organic Liquids shall be equipped with: [Loading vessels and pressure requirement outlined in Class A Facility definition (B)(1)]~~

~~(i) A CARB Certified Vapor Recovery and/or disposal system.
[SCAQMD Rule 462 – Organic Liquid Loading, 5/14/1999]~~

~~[New to D8 – Removed section (ii) - A District-approved Vapor Recovery and/or disposal system only when such system does not require CARB Certification pursuant to Health and Safety Code 41954 per suggestion from the EPA]~~

~~(b) Loading shall be accomplished in such a manner that the displaced vapor and air will be vented to a vapor recovery system. All connections and vapor lines are to be maintained in a Vapor Tight condition to prevent fugitive vapor leaks. Measures shall be taken to prevent fugitive liquid leaks from the loading device when it is not in use or to accomplish complete drainage before the loading device is disconnected, to prevent excess organic liquid drainage. The loading of Organic Liquids shall be accomplished in such a manner that the displaced organic vapors and air are vented under design conditions to the Vapor Recovery and/or disposal system. [vapor/liquid tight requirement outlined in (C)(1)(e)]~~

~~(c) Each Vapor Recovery and/or disposal system shall reduce the emissions of VOCs to 0.08 pound or less per thousand gallons (10 grams per 1,000 liters) of Organic Liquid transferred.~~

~~(d) The backpressure in the Vapor Recovery and/or disposal system shall not exceed 18 inches of water column pressure. [Class A updates obtained from SCAQMD –Rule 462- Organic Liquid Loading, 5-14-1999)]~~

~~(e) Any Class “A” facility transferring Gasoline into any truck, trailer, or railroad tank car shall be designed and operated for bottom loading only.~~

~~(f) The transfer equipment shall be maintained Vapor Tight and Liquid Tight, and operated so that there are no overfills. [New to D11 – updated language to refer to vapor and liquid tight, instead of fugitive vapor leak at the suggestion of the EPA to better reflect defined terms.]~~

~~(g) Tanker truck liquid loading hoses and vapor return hoses shall be capped, plugged, or have a secondary valve closed whenever the hoses are not in active use to maintain equipment in a Vapor Tight and Liquid Tight condition.. [New to D11 – updated language to refer to vapor tight and liquid tight at the suggestion of EPA to better reflect defined terms]
[New to D8 – at the suggestion of Engineering to help clarify/support vapor/liquid tight]~~

(2) Loading Requirements at Class “B” Facilities

~~A person shall not load organic liquids having a true vapor pressure of 77.5 millimeters of mercury (1.5 psia) or greater under actual loading conditions into any tank truck, trailer, or railroad car from a Class B loading facility, unless: [In order to reduce repetition, Organic Liquid and it’s pressure is further defined in definition located in 102]~~

(a) Each Class B Facility loading Organic Liquids, shall be equipped with:~~The facility is equipped with a vapor recovery system to prevent the release of fugitive vapor emissions during the filling of organic liquid delivery vehicles.~~[Further broken out below]

(i) A CARB Certified Vapor Recovery and/or disposal system with a Vapor Recovery Efficiency of 95 percent (95%).
[New to D10 – removed reference to test method. New to D8 – per EPA suggestion, efficiency or emission limit added. Limits from Sac Metro, Yolo-Solano and Placer]

a. The backpressure in the Vapor Recovery and/or disposal system shall not exceed 18 inches of water column pressure. [New to D8 – per EPA recommendation Class B updates obtained from AVAQMD –Rule 462- Organic Liquid Loading, 9/19/2017)]

(iv) A Submerged Fill Loading or bottom fill loading system. All Gasoline or equivalent vapor pressure Organic Liquids shall be transferred in this manner.

(v) A pressure vacuum valve on the aboveground stationary storage tank with a minimum pressure valve setting of eight (8) ounces per square inch, provided that such setting will not exceed the tank’s maximum pressure rating. This requirement does not pertain to Floating Roof Tanks[moved from (C)(2)(c)]

(b) ~~The facility is equipped with a vapor recovery system to prevent the release of fugitive vapor emissions displaced during the filling of the facility's stationary storage containers with all connections and vapor lines to be maintained vapor tight; and The transfer equipment shall be operated and maintained so that there are no overfills, facility vapor leaks, liquid leaks, or liquid leaks from disconnect operations.~~ [Language from SCAQMD Rule 462 – Organic Liquid Loading, 5/14/1999]

(c) ~~The facility is equipped with a pressure vacuum valve on the above ground stationary storage containers with a minimum pressure valve setting of eight (8) ounces per square inch, provided that such setting will~~

~~not exceed the container's maximum pressure rating. [moved to (C)(2)(a)(iv)]~~

(D) Additional Requirements

- (1) Other ~~agency~~~~agencie~~s requirements - The ~~V~~vapor ~~R~~recovery ~~S~~systems used to comply with the provision of this Rule shall comply with all safety, fire, weights and measures, and other applicable codes and/or regulations, including those listed in the California Health and Safety Code Sections 41950 - 41974.
- (2) ~~Fugitive Vapor and Liquid Leaks~~~~Vapor Tight and Liquid Tight~~ - All of the components of the facility including but not limited to tanks, flanges, seals, pipes, pumps, valves, meters, connectors, shall be maintained ~~Vapor Tight and Liquid Tight~~ and operated so as to prevent ~~fugitive vapor leaks, fugitive liquid leaks and excess O~~rganic ~~L~~iquid drainage during transfer, storage and handling operations. *[New to D11 – updated language to refer to vapor and liquid tight, instead of fugitive vapor and liquid leak at the suggestion of the EPA to better reflect defined terms.]*
- (3) Organic Liquid Transport ~~(Tank Truck, Trailer, etc.)~~
 - (a) A person shall not allow loading or unloading of ~~O~~rganic ~~L~~iquid, or other use or operation of any designated transporting vessel unless the vessel has a valid certification of vapor integrity as defined by the applicable Air Resources Board Certification and Test Procedures, pursuant to Health and Safety Code Section 41962(9) and the California Administrative Code Title 17, Section 94004.
 - (b) Vapor leaks from dome covers, pressure vacuum vents or other sources shall be determined in accordance with EPA Method 21. *[New to D10 – reverted back to original text instead of referencing test method to be consistent with the rest of the rule language.]*
 - (c) The transport equipment shall be operated ~~such that there are no fugitive liquid leaks, both~~ Vapor Tight and Liquid Tight. *[New to D11 – updated language to refer to vapor and liquid tight, instead of fugitive vapor and liquid leak at the suggestion of the EPA to better reflect defined terms.]*
- (4) Switch Loading

Uncontrolled ~~S~~witch ~~L~~oading is prohibited except at Class B Facilities where~~unless~~:

 - (a) any vapors vented to the atmosphere do not at any point during the transfer exceed 10,000 ppmv, measured as equivalent methane, with a portable hydrocarbon analyzer in accordance with EPA Method 21, or
 - (b) emissions are controlled by a ~~V~~vapor ~~R~~recovery ~~S~~system.

(5) Leak Inspection Requirements

- (a) The Owner/Operator of any Class A or B, facility shall be required to perform an inspection of the vapor collection system, the vapor disposal system, and each loading rack handling Organic Liquids, for facility vapor leaks or liquid leaks of volatile organic compounds on one of the following schedule:
- (i) Monthly if sight, sound, and smell are used as detection methods.
- a. If leak inspections are conducted monthly by sight, sound and smell, an organic vapor analyzer (OVA) must be used to conduct checks every six months. [New to D8 per EPA suggestion]
- (ii) Quarterly if an OVA is used to monitor for facility vapor leaks.
- (b) Each detection of a leak shall be repaired or replaced within 72 hours. The repaired or replacement component shall be reinspected the first time the component is in operation after the repair or replacement. [Section 5 Language from SCAQMD Rule 462-Organic Liquid Loading, 5/14/1999]

(65) Distribution of Responsibilities

- (a) The ~~owner or operator~~ Owner/Operator of an ~~O~~rganic ~~L~~iquid ~~L~~oading ~~F~~acility is responsible and liable for complying with the provisions of this rule, and for maintaining the equipment at the facility in such condition that it can comply with the requirements of this rule if properly operated. If employees of the ~~owner or operator~~ Owner/Operator of the facility supervise or ~~otherwise facilitate effect~~ the transfer operation, the ~~owner or operator~~ Owner/Operator of the facility shall be responsible for ensuring that the transfer operation complies with all requirements of this rule and that the transfer equipment is properly operated.
- (b) The ~~owner, operator~~ Owner/Operator, or driver of a tank truck, trailer, or railroad tank car is responsible for complying with Subsections (D)(2) and (D)(3) of this rule.
- (c) ~~Where appropriate, the owner or operator of an organic liquid loading facility and the owner operator, or driver of a tank truck, trailer, or railroad tank car may be separately or jointly found in violation of this rule.~~

(E) Exemptions

- (1) The provisions of subparagraphs (C)(1)(e) and (C)(2)(b) shall not apply to components found in violation of facility vapor leaks or liquid leaks either of which is detected and recorded originally by the Owner/Operator, provided the repair or replacement of applicable equipment is completed within the specified

period as given in subparagraph (D)(5)(b).
[SCAQMD Rule 462-Organic Liquid Loading, 5/14/1999]

(F) Record Keeping and Reporting

- (1) Any facility subject to this rule shall, as a minimum, maintain the following records:
 - (a) The ~~owner or operator~~ Owner/Operator shall maintain a log of all inspections, repairs, description of leaks, and maintenance on equipment subject to this rule. Such logs or records shall be maintained at the facility for at least 2 years (5 years for Title V facilities and sources subject to MACT standards) and shall be made available to the APCO upon request. [5 year requirement new to D7, clarification suggested by EPA - all Title V Permits requires records to be retained onsite for at least 5 years. Per MDAQMD Rule 1203 – Federal Operating Permits (D)(d)(ii)]
 - (b) The ~~owner or operator~~ Owner/Operator of a Class A or Class B Facility shall prepare a log ~~showing the daily~~ demonstrating:
 - (i) ~~input~~ Daily Throughput.
 - (ii) ~~output~~ Monthly Throughput Summary - for a rolling twelve month period.
 - (iii) A ~~average~~ stored volume over the 24 hour period (midnight to midnight).
 - (iv) Daily storage and transfer temperatures of the organic liquid. [new to D6 - to maintain daily requirement of this record keeping]
 - (v) Results of leak inspection checks. [New to D8, making sure the leak inspection requirement is documented]
 - (vi) S ~~stored~~ product's name and Chemical Abstracts Service (CAS) number.
 - ~~(vi) — a monthly summary of the throughput for the calendar year to date.~~
- (2) Any facility classified as exempt or claiming to be exempt shall meet the same record keeping requirements of this rule so as to be able to prove the exemption status.

(FG) Test Methods ~~For~~ for Compliance Verification

- (1) When more than one test method is specified for testing, A ~~a~~ violation determined by any one of these test methods shall constitute a violation of the rule.
 - (a) ASTM METHOD D-323-06: Reid vapor pressure shall be determined in accordance with American Society of Testing and Materials D323-06, Standard Test Method for Vapor Pressure of Petroleum Products (Reid Method).

- (b) ASTM METHOD D-2879-97 (2002)(e1): True vapor pressure shall be determined in accordance with American Society of Testing and Materials D2879-97(2002)(e1), Standard Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope.
- (c) EPA METHODS 2A OR 2B: The gas flow rate shall be determined in accordance with EPA Method 2A, Direct Measurement of Gas Volume Through Pipes and Small Ducts; or EPA Method 2B, Determination of Exhaust Gas volume flow rate From Gasoline Vapor Incinerators, as applicable.
- (d) EPA METHOD 21: The gas tight condition shall be determined in accordance with EPA Method 21, Determination of Volatile Organic Compound Leaks, using a portable analyzer calibrated with methane gas.
- (e) EPA METHODS 25, 25A OR 25B: VOC emissions shall be determined in accordance with EPA Method 25 – Gaseous Nonmethane Organic Emission, or 25A - Gaseous Organic Concentration, Flame Ionization; or EPA Method 25B - Gaseous Organic Concentration, Infrared Analyzer, as applicable. *[New to D10 – updated to add 25 as a test method and correct the double description of 25A]*
- (f) CARB TEST PROCEDURE TP-203.1: The terminal vapor recovery system efficiency shall be determined in accordance with CARB Vapor Recovery Test Procedure TP-203.1, Determination of Emission Factor of Vapor Recovery Systems of Terminals.
- (g) CARB CERTIFICATION PROCEDURE CP-202 – CERTIFICATION PROCEDURE FOR VAPOR RECOVERY SYSTEMS OF BULK PLANTS: Vapor Recovery efficiency for shall be determined in accordance with CARB Certification Procedure CP-202. *[Language from SCAQMD Rule 462 – Organic Liquid Loading, 5/14/1999]*

- (2) Other test methods demonstrated to provide results that are acceptable for determining Reid or true vapor pressure for purposes of demonstrating compliance with this rule, after review and approval in writing by the District, the ARB, and the U.S. EPA, may also be used. *[New to D9 – Except where otherwise noted, section (G) language adapted from Yolo-Solano AQMD Rule 2.21 Organic Liquid Storage and Transfer (09/14/16) based on discussions with EPA]*

~~Vapor Tightness (Fugitive Vapor Leaks) for all equipment described in this rule, unless otherwise specified, shall be determined by EPA Method 21 – Determination of Volatile Organic Compounds Leaks.~~

- ~~(b) Vapor Recovery System Efficiency for Delivery Vessels shall be determined by the EPA Method entitled Control of Organic Compound Leaks from Gasoline Tank Trucks and Vapor Collection Systems (method specified in the CTG EPA-450/2-78-051), or the CARB Method entitled,~~

~~"Certification and Test Procedures for Vapor Recovery Systems of Gasoline Delivery Tanks".~~

- ~~(c) — Reid Vapor Pressure shall be determined in accordance with ASTM Method D-323-82, and the true vapor pressure in psi absolute of stored liquid shall be determined by using the nomograph contained in American Petroleum Institute Bulletin 2517 for conversion of Reid vapor pressure to true vapor pressure.~~
- ~~(d) — Vapor Recovery System Efficiency for Bulk Plants shall be determined by CARB Method 202, "Certification of Vapor Recovery Systems—Bulk Plants".~~
- ~~(e) — Vapor Recovery System Efficiency for Terminals shall be determined by CARB Method 203, "Certification of Vapor Recovery Systems—Gasoline Terminals".~~
- ~~(f) — Vapor Recovery System Efficiency for Service Stations shall be determined by the CARB Methods in "Test Procedures for Determining the Efficiency of Gasoline Vapor Recovery Systems at Service Stations".~~
~~*[Updated Certification Procedure Titles for CP-201-203 to reflect what is currently listed on the CARB website]*~~

See SIP Table at <http://www.mdaqmd.ca.gov/Modules/ShowDocument.aspx?documentid=45>

~~[SIP: Approved 5/3/95, 60 FR 21702, 40 CFR 52.220(e)(198)(i)(E)(1); Approved 6/9/82, 47 FR 25013, 40 CFR 52.220(e)(85)(v)(A); Approved 12/21/78, 43 FR 59489, 40 CFR 52.220(e)(42)(xiii)(A); Approved 7/26/77, 42 FR 37976, 40 CFR 52.220(e)(31)(vi)(A)]~~

RULE 463

Storage of Organic Liquids

(A) General Description

(1) Purpose:

~~The purpose of this rule is to~~ To limit control the emissions of ~~V~~olatile ~~O~~rganic ~~C~~ompounds (VOC) and toxic compounds ~~(such as benzene)~~ during the ~~s~~Storage of ~~o~~Organic ~~L~~iquids, ~~and in conjunction with Rules 461 and 462, limit the emissions from the storage, transfer, and dispensing of organic liquids, including bulk facilities, retail service stations, and others, the transport of fuels between these facilities and the transfer of fuel into motor vehicle tanks.~~

(2) Applicability:

- (a) All aboveground Gasoline storage tanks of capacity of at least 250 gallons (950 liters);
- (b) All aboveground Organic Liquid storage tanks of capacity of at least 19,815 gallons (75,000 liters); and
- (c) All Organic Liquid storage tanks of capacity of at least 39,630 gallons (150,000 liters).

(3) Severability:

- (a) If any portion of this rule shall be found to be unenforceable, such finding shall have no effect on the enforceability of the remaining portions of the rule, which shall continue to be in full force and effect. [New to D6 – moved to General Description from Section (g) at the suggestion of District Counsel.]

(B) Definitions

The definitions contained in District Rule 102 – Definition of Terms, shall apply unless a term is otherwise defined herein. ~~For the purposes of this rule, the following terms are defined:~~

- (1) ~~Gasoline: means any organic liquid, including petroleum distillate and methanol, having a Reid Vapor Pressure of 200 mm Hg (3.9 pounds per square inch), or greater, and used as a motor vehicle fuel, or any fuel which is commonly or commercially known or sold as gasoline. [in 102]~~
- (2) ~~Organic Liquid: means any compound of carbon, including organic materials, organic solvents and gasoline, which is in a liquid phase at ambient or storage conditions [move to 102]:~~
- (3) ~~Organic Materials: means chemical compounds of carbon excluding: carbon monoxide, carbon dioxide, carbonic acid, metallic carbides, metallic carbonates and ammonium carbonate.[in 102]~~
- (4) ~~Organic Solvents: includes diluents and thinners and are defined as organic materials which are liquids at standard conditions and which are used as dissolvers, viscosity reducers or cleaning agents, except that such material exhibiting a boiling point higher than 104 oC (219oF) at 0.5 mm Hg absolute pressure or having an equivalent vapor pressure shall not be considered to be solvent unless exposed to temperatures exceeding 104oC (219oF). [in 102]~~
- (1) ~~“External Floating Roof” - A vapor loss control device, consisting of a pontoon-type or double-deck type cover that rests on the surface of the liquid contents and which is equipped with an approved closure device between the tank shell and roof edge. [Placer APCD, Rule 212 – Storage of Organic Liquids, 6/19/97] [Moved from the draft to 102]~~
- (2) ~~“Internal Floating Roof” - A vapor loss control device consisting of a fixed roof with an internal floating type cover which prevents the release or emission to the atmosphere of organic vapors or gases at an efficiency equivalent to an approved External Floating Roof closure device. [Placer APCD, Rule 212 – Storage of Organic Liquids, 6/19/97] [Moved from the draft to 102]~~
- (1) ~~“Metallic-Shoe Seal” - A type of seal used to minimize evaporative losses of Organic Liquids from a storage tank equipped with an External Floating Roof. It serves as a primary seal, and is constructed with vertical metal plates or "shoes", connected by braces or other devices to the circumference of the floating roof. They are partially immersed in the liquid being stored, and are suspended in such a way that they are forced outward against the inner tank wall. [Placer APCD, Rule 212 – Storage of Organic Liquids, 6/19/97]~~
- (2) ~~“Resilient-Toroid Seal” - A type of seal used to minimize evaporative losses of Organic Liquids from a storage tank equipped with an External Floating Roof. It is a toroidal tube, or "donut", made of fabric or other resilient material, that rests on the surface of the stored liquid. It serves as a primary seal that minimizes evaporative losses from the tank. The toroid seal may be filled with air, foam, or other resilient material. [Placer APCD, Rule 212 – Storage of Organic Liquids, 6/19/97]~~

⊖ “True Vapor Pressure”—The true vapor pressure under actual storage conditions as determined by the test method ASTM D-323-82. [Placer APCD, Rule 212—Storage of Organic Liquids, 6/19/97] [move from draft to 102] [definitions added to provide clarity and reduce repetition in the rule]

(3) “Vapor Tight” – is the detection of less than 1,000 ppm, as methane, using an appropriate hydrocarbon analyzer when sampling is performed according to the procedures specified in EPA Method 21. [New to D10 – at the suggestion of the EPA to better reflect defined terms, updated language to remove reference to Fugitive Vapor Leak which is alternately defined in 102.]

[New to D7 – Removing from 102 definition rule due to detection rates that can vary based on the rule/equipment in question. Detection limit based on Yolo-Solano rule deemed as RACT, detectable limit reduced from 10,000 to 1,000. Based on discussions with EPA]

(C) Requirements

(1) Tanks Over ~~150,000 Liters~~ In 39,630 gallons of Capacity

No person shall place, store or hold in any ~~stationary tank, reservoir or other container of more than~~ storage tank, with a capacity of ~~39,630 gallons~~ 150,000 liters (39,630 gallons (150,000 liters) or greater, capacity, any organic liquid having a Ttrue Vvapor Ppressure of ~~25.8 mm Hg (0.5 psi) 77.5 mm Hg (1.5 psia)~~ or greater ~~under actual storage conditions~~, unless such tank, ~~reservoir or other container~~ is a pressure tank maintaining working pressures sufficient at all times to prevent organic vapor or gas loss to the atmosphere, or is designed and equipped with one of the following vapor loss control devices, which is properly installed, properly maintained, and in good operating order: [Reduced vapor pressure found in other District rules; Placer APCD, Rule 212 – Storage of Organic Liquids, 6/19/97; South Coast AQMD, Rule 463 – Organic Liquid Storage, 11/4/11; Yolo-Solano, Rule 2.21, 8/21/16; Antelope Valley AQMD, Rule 463 – Organic Liquid Storage, 3/11/94.]

(a) An Eexternal Ffloating Rroof, ~~consisting of a pontoon type or double-deck type cover~~ that rests on the surface of the liquid contents at all times, except as provided in Subsection (C)(3)(c) and is equipped with a closure device between the tank shell and roof edge. Except as provided in Subsections (C)(1)(a)(~~3iii~~) and (C)(1)(a)(~~4iv~~), the closure device shall consist of two seals, one above the other; the one below shall be referred to as the primary seal, and the one above shall be referred to as the secondary seal. Seal designs shall be submitted to the ~~Air Pollution Control Officer (APCO)~~ and shall not be installed or used unless they are approved by the APCO as meeting the criteria set forth in Section (F) - Specifications ~~f~~For Closure Devices, as applicable. [External floating roof defined in definitions]

- (i) For a closure device on a welded tank shell which uses a ~~M~~metallic-~~S~~shoe-type ~~S~~seal as its primary seal: refer to Section (F)(1) for specifications.
- (ii) For a closure device which uses ~~sd~~ a ~~R~~resilient-~~T~~toroid-type ~~S~~seal as its primary seal: refer to Section (F)(2) for specifications.
- (iii) For a closure device on a ~~reieted-riveted~~ tank shell which uses a ~~M~~metallic-~~S~~shoe-type ~~S~~seal as its primary seal: refer to Section (F)(3) for specifications.
- (iv) EXEMPTION: The requirements of Subsections (F)(1) through (F)(3) shall not apply to any person who demonstrates to the APCO that a closure device has been installed, ~~or is available for installation~~, which by itself or in conjunction with other vapor loss control devices, controls vapor loss at all tank levels with an effectiveness equivalent to a closure device on a welded tank which meets the requirements of Subsection (F)(1). This exemption is subject to the specifications of Section (F)(4) of this rule.
- (v) ANNUAL ~~DISTRICT~~ INSPECTIONS: The primary seal envelope shall be made available for unobstructed inspection by the ~~APCO-on~~APCO on an annual basis at the location selected along its circumference at random by the APCO. In the case of riveted tanks with toroid-type seals, eight such locations shall be made available; in all other cases, four such locations shall be made available. ~~If the APCO detects one or more violations as a result of any such inspection, the APCO~~If a violation is discovered during an annual inspection, the APCO may require ~~such~~ further unobstructed inspection of the primary seal ~~as may be necessary~~ to determine the seal condition for its entire circumference. In addition, for tanks ~~with installing a~~ secondary seal ~~s installed after February 20, 1979,~~ the primary seal envelope shall be made available for inspection by the APCO prior to installation of the secondary seal. ~~Thereafter, and for tanks with secondary seals installed before February 20, 1979, the primary seal envelope~~Secondary seals that are already in place shall be made available for unobstructed inspection by the APCO for its full length every 5 years ~~after February 20, 1979. In the event that a,~~ ~~except that if the~~ secondary seal is voluntarily removed by the ~~O~~owner-~~or/-O~~operator ~~prior thereto~~, it shall be made available for such inspection at that time. The ~~O~~owner-~~or/-O~~operator shall provide notification to the APCO no less than 7 working days prior to voluntary removal of the secondary seal. [date no longer applicable, all secondary seals are now subject to 5 year unobstructed inspections]
- (vi) All openings in the roof except ~~pressure~~Pressure-~~vacuum~~Vacuum ~~valves~~Valves, which shall be set to within ten percent (10%) of the maximum allowable working pressure of the roof, shall provide a projection below the liquid surface to prevent belching of liquid and to prevent entrained or formed organic vapor from escaping

- from the liquid contents of the tank and shall be equipped with a cover, seal, or lid. The cover, seal, or lid shall at all times be in closed position, with no visible gaps, except when the device or appurtenance is in use.
- (vii) Any emergency roof drain shall be provided with a slotted membrane fabric cover, or equivalent, that covers at least nine-tenths of the area of the opening.
 - (viii) A floating roof shall not be used if the organic liquid stored has a ~~T~~true ~~V~~vapor ~~P~~pressure of 569 mm Hg (11 psi) absolute or greater under storage conditions.
- (b) A fixed roof with an internal-floating-type cover that rests on the surface of the liquid contents at all times except as provided in Subsection (C)(3)(c) and is equipped with a closure device.
- (i) For a fixed roof tank the closure device shall consist of either a liquid mounted primary seal only, or two seals; a primary and a secondary seal. All openings and fittings shall be fully gasketed and/or controlled in a manner specified by the APCO. The closure device shall control vapor loss with an effectiveness equivalent to ~~the outlined criteria in a closure device which meets the requirements of paragraph~~ Subsection (F)(1). Internal ~~F~~floating ~~R~~roof and seal designs shall be submitted to the APCO and shall not be installed or used unless they are approved by the APCO.
 - (ii) A fixed roof ~~tank container~~ with an internal-floating-type cover shall not be used if the organic liquid stored has a ~~T~~true ~~V~~vapor ~~P~~pressure of 569 mm Hg (11 psi) absolute or greater under actual storage conditions.
 - (iii) ~~Compliance shall be verified by measuring with an explosimeter the concentration of organic compound in the vapor space above the internal floating roof, in terms of the lower explosive limit (LEL). Such reading for an internal floating roof shall not exceed 50 percent of the LEL for those installed prior to December 19, 1988 and 30 percent of the LEL for those installed after December 19, 1988. Compliance shall be verified by measuring the vapor space above the floating roof with an explosimeter, which will determine the lower explosive limit (LEL). LEL readings for the Internal Floating Roof shall not exceed 50 percent (50%) for those installed prior to December 19, 1988 and 30 percent (30%) of the LEL for those installed after December 19, 1988. [Content not changed, rewrote for clarification]~~
 - (iv) Visual ~~i~~inspection of the secondary seal shall be performed by the tank operators semi-annually. A record of such inspections shall be maintained and such records shall be made available for review by the APCO upon request.
 - (v) The primary and secondary seals shall be inspected and repaired, if necessary, each time the tank is emptied and gas-freed. The APCO

shall be notified at least 48 hours in advance of each such gas-freeing.

- (c) A fixed roof tank with a vapor recovery system consisting of a system capable of collecting all organic vapors and gases, and a vapor return or disposal system ~~capable of processing such vapors and gases, so as to prevent their emission to the atmosphere at an efficiency of at least 95 percent (95%) by weight.~~
 - (i) Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a ~~gas-tight~~Vapor Tight cover which shall be closed at all times except during gauging or sampling.
 - (ii) All piping, valves and fittings shall be constructed and maintained ~~in a gas tight condition~~both Liquid Tight and Vapor Tight, such that no organic vapor or gas leaks are detectable. [new to D4. Liquid Tight and Vapor Tight are defined in our rule 102, and provides additional clarity].
- (d) Other equipment, having a vapor loss control efficiency of at least 95 percent (95%) by weight, ~~shall provided~~ an application for installation of such equipment is submitted to and and obtain written approval from the APCO prior to the commencement of construction and/or operation.

(2) Tanks ~~w~~With 150,000 Liters39,630 Gallons ~~Or~~ Less Capacity

A person shall not place, store or hold in any above-ground ~~stationary storage tank, or other container of~~ with a capacity of 39,630 gallons (150,000 liters) ~~(39,630)~~ or less, ~~capacity~~ any organic liquid having a ~~T~~True ~~V~~Vapor ~~P~~Pressure of 77.5 mm Hg (1.5 psia) or greater under actual storage conditions, unless such tank is equipped with a pressure-vacuum valve which is set to within ten percent ~~(10%)~~ of the maximum allowable working pressure of the ~~container tank~~, or is equipped with a vapor loss control device which complies with the requirements set forth in Section (C)(1). ~~The provisions of this section shall not apply to any container of 950 liters (251 gallons) or less capacity.~~ [covered in applicability statement]

(3) Additional Requirements

- (a) All of the components of a facility including but not limited to tanks, flanges, seals, pipes, pumps, valves, meters, connectors, shall be maintained and operated so as to prevent ~~F~~F~~ugitive~~ ~~V~~V~~apor~~ ~~L~~L~~eaks~~, ~~F~~F~~ugitive~~ ~~L~~L~~iquid~~ ~~H~~H~~eaks~~, and excess organic liquid drainage during transfer, storage and handling operations. [New to D11 – based on EPA suggestions, changed back to previously approved SIP language because requiring tanks and all components to be vapor tight (1000 ppm) seemed like it might be too stringent. Fugitive Vapor Leak is currently defined in Rule 102 at 3000 ppm]

[New to D10 – updated language to refer to vapor and liquid tight, instead of fugitive vapor and liquid leak at the suggestion of the EPA to better reflect defined terms.]

- (b) Efficiency, as ~~used~~outlined in Subsections (C)(1)(c) and (~~e~~C)(1)(d) means a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor control system. Base line emissions shall be calculated by using the criteria outlined in American Petroleum Institute Bulletin 2518.
- (c) The roof of any ~~I~~nternal or ~~E~~external ~~F~~loating ~~R~~oof tank is to be floating on the liquid at all times (i.e. free of the roof leg supports) except when the tank is being completely emptied for cleaning, or repair. The process of emptying, and/or refilling, when the roof is resting on the leg supports, shall be continuous and shall be accomplished as rapidly as possible, and;
- (i) If the tank has been gas-freed and is to be refilled with ~~G~~gasoline, the roof shall be refloated with water, or equivalent procedure approved by the APCO.

(d) Floating Roof Tank Inspection Requirements:

[New to D6 – Changed from Owner/Operator to Floating Roof Tank]

- (i) All floating roof tanks subject to this rule shall be inspected twice per year at 4 to 8 months intervals.
- (ii) Additionally, the primary and secondary seals shall be inspected each time a floating roof tank is emptied and degassed. Gap measurements shall be performed on an External Floating Roof tanks when the liquid surface is still but not more than 24 hours after the tank roof is refloated.

(e) Floating Roof Tank Maintenance Requirements:

[New to D6 – Added Floating Roof Tank to Maintenance Requirements]

Any floating roof tank which does not comply with any provision of this rule shall be brought into compliance within 72 hours of the determination of non-compliance. The repaired or replacement component shall be reinspected the first time the component is in operation after the repair or replacement. [Sections (C)(3)(d) & (C)(3)(e) obtained from South Coast AQMD, Rule 463 – Organic Liquid Storage, 11/4/11]

(f) Non-Floating Roof Tank Inspection Requirements:

Any tank in retail service shall be inspected for compliance with this rule not less frequently than once per month. All other tanks shall be inspected not less than once a year. [New to D6 - Added section (f) to include inspection frequency for non-floating roof tanks.]

(D) Record Keeping and Recording

- (1) A person whose tanks are subject to this rule shall keep an accurate record of liquids stored in such ~~containers tanks~~ and the ~~Ttrue V~~vapor ~~Pp~~ressure ranges of such liquids, ~~or other criteria approved by the APCO.~~
[New to D6 – per EPA suggestion, removed reference to APCO]
- (2) Organic liquids listed on the addendum to this rule shall be deemed to be in compliance with the appropriate vapor pressure limits for the tank in which it is stored, provided the actual storage temperature does not exceed the corresponding maximum temperature listed ~~as recorded on a daily basis.~~
- (3) The ~~Oowner~~-~~or~~-~~Ooperator~~ shall maintain a log of all inspections, repairs and maintenance on equipment subject to this rule. Such a log or records shall be maintained at the facility for at least ~~2~~5 years and shall be made available to the APCO upon request.

(E) Exemptions

- (1) The provisions of Subsection (C)(3)(c) shall not apply to ~~gasoline~~-Gasoline storage tanks at bulk ~~gasoline~~-Gasoline distribution terminals which do not have:
 - (a) ~~E~~existing facilities for treatment of waste-water used to refloat the tank roof; or
 - (b) ~~F~~facilities for equivalent emission control when refloating the roof with product.
- (2) Notwithstanding the secondary and primary seal requirements of subparagraphs (F)(1), a secondary or primary seal may be loosened or removed for preventive maintenance, inspection and/or repair upon prior notification and subject to the prior written approval of the APCO and for a period not exceeding 72 hours.

(F) Specifications ~~f~~For Closure Devices

- (1) For a closure device on a welded tank shell which uses a ~~Mmetallic~~-~~Sshoe-type~~ Sseal as its primary seal:
 - (a) ~~Gaps~~ ^[MLZ1] between the tank shell and the primary seal shall not exceed 1 ½ inches (3.8 centimeters) ~~(1-1/2 inches)~~ for an accumulative length of 10 percent ~~(10%)~~, ½ inch (1.3 centimeters) ~~(1/2 inch)~~ for another 30 percent ~~(30%)~~, and 1/8 of an inch (0.32 centimeters) ~~(1/8 inch)~~ for the remaining 60 percent ~~(60%)~~ of the circumference of the tank. No gap between the tank shell and the primary seal shall exceed 1 ½ inches (3.8 centimeters). ~~(1-1/2 inches)~~. No continuous gap greater than a 1/8 of an inch (0.32 centimeters) ~~(1/8 inch)~~ shall exceed ~~10%-~~ percent (10%) of the circumference of the tank.

- (b) Gaps^[MLZ2] between the tank shell and the secondary seal shall not exceed a 1/8 of an inch (0.32 centimeters) ~~(1/8-inch)~~ for an accumulative length of 95 percent (95%) of the circumference of the tank, and shall not exceed a 1/2 an inch (1.3 centimeters) ~~(1/2-inch)~~ for an accumulative length of the remaining 5 percent (5%) of the circumference of the tank. No gap between the tank shell and the secondary seal shall exceed 1/2 an inch (1.3 centimeters) ~~(1/2-inch)~~.
- (c) Metallic-Sshoe^[MLZ3] ~~-type~~ Sseals installed on or after date of adoption of this rule, shall be installed so that one end of the shoe extends into the stored liquid and the other end extends a minimum vertical distance of 24 inches (61 centimeters) ~~(24-inches)~~ above the stored liquid surface.
- (d) The geometry of the shoe shall be such that the maximum gap between the shoe and the tank shell is no greater than double the gap allowed by the seal gap criteria for a length of at least 18 inches (46 centimeters) ~~(18 inches)~~ in the vertical plane above the liquid surface. There shall be no holes or tears in, or openings which allow the emission of organic vapors through the secondary seal or in the primary seal envelope surrounding the annular vapor space enclosed by the roof edge, stored liquid surface, shoe, and seal fabric. ~~-(A typical metallic-shoe-type seal with a pantagraph-type hanger is shown in Figure 1. This sketch is for illustrative purposes only and does not constitute endorsement of any product or company.) [Figure 1 is no longer available]~~
- (e) The secondary seal shall allow easy insertion of probes up to 1 1/2 inches (3.8 centimeters) ~~(1-1/2-inches)~~^[MLZ4] in width in order to measure gaps in the primary seal in accordance with section (C)(1)(a)(v). ~~-[clarifying]~~
- (f) The secondary seal shall extend from the roof to the tank shell and shall not be attached to the primary seal.
- (2) For a closure device which used a Resilient-Toroid-~~type~~ sSeal as its primary seal:
- (a) If installation was commenced prior to February 20, 1980, gaps between the tank shell and the primary seal shall not exceed an 1/8 of an inch (0.32 centimeters) ~~(1/8-inch)~~ for an accumulative length of 95 percent (95%) of the circumference of the tank, and shall not exceed a 1/2 an inch (1.3 centimeters) ~~(1/2-inch)~~ for an accumulative length of the remaining 5 percent (5%) of the tank circumference. No gap between the tank shell and the ~~2~~primary seal shall exceed a 1/2 an inch (1.3 centimeters) ~~(1/2-inch)~~.
- (b) If installation was commenced prior to February 20, 1980 gaps between the tank shell and the secondary seal shall not exceed an 1/8 of an inch (0.32 centimeters) ~~(1/8-inch)~~ for an accumulative length of 95 percent (95%) of the circumference of the tank, and ~~shall not exceed~~ a 1/2 an inch (1.3 centimeters) ~~(1/2-inch)~~^[MLZ5] for an accumulative length of the

remaining 5 percent (5%) of the tank circumference. No gap between the tank shell and the secondary seal shall exceed a ½ an inch (1.3 centimeters) (1/2 inch). ~~(A typical resilient toroid type seal with resilient foam type filling is shown in Figure 2. This sketch is for illustrative purposes only and does not constitute endorsement of any product or company.) [Figure 2 is no longer available]~~

- (c) If installation is commenced after February 20, 1980, the tank ~~Oowner-or/~~ Ooperator shall, prior to installation, demonstrate to the ~~Air Pollution Control Officer~~ APCO, that the closure device controls vapor loss with an effectiveness equivalent to a closure device on a welded tank which meets the requirements of Subsection (F)(1)(a). The ~~Air Pollution Control Officer~~ APCO shall determine whether equivalence exists in accordance with Subsection (C)(1)(a)(iv). If equivalence is demonstrated using primary or secondary seal gap criteria (if any) different from the criteria specified in Subsections (F)(2)(a) or (b), those criteria shall be controlling for all purposes of this rule in lieu of the criteria specified in Subsections (F)(2)(a) and (b).
 - (d) There shall be no holes or tears in, or openings which allow the emission of organic vapors through the secondary seal or in the primary seal envelope surrounding the annular vapor space enclosed by the roof edge, seal fabric and secondary seal.
 - (e) The secondary seal shall allow easy insertion of probes up to 1 ½ inches (3.8 centimeters) (1-1/2 inches) ~~[ML26]~~ in width in order to measure gaps in the primary seal.
 - (f) The secondary seal shall extend from the roof of the tank shell and not be attached to the primary seal.
- (3) For a closure device on a riveted tank shell which uses a ~~Mmetallic-Sshoe-type~~ Sseal as its primary seal;
- (a) The closure device shall consist of two seals, one above the other; the one below shall be referred to as the primary seal, and the one above shall be referred to as the secondary seal.
 - (b) The closure device shall control vapor loss with an effectiveness equivalent to a closure device on a welded tank which meets the requirements of Subsection (F)(1). The APCO shall determine whether equivalence exists in accordance with Subsection (C)(1)(a)(4iv). Gaps between the primary and secondary seals shall not exceed the gaps (if any) associated with the closure device approved as equivalent by the APCO, and shall be controlling for all purposes of this rule.
 - (c) Metallic-~~Sshoe-type~~ Sseals installed on or after February 20, 1979 shall be installed so that one end of the shoe extends into the stored liquid and the other end extends a minimum vertical distance of 24 inches (61

centimeters) ~~(24 inches)~~ above the stored liquid surface. The geometry of the shoe shall be such that the maximum gap between the shoe and the tank shell is no greater than double the gap allowed by the seal gap criteria for a length of at least 18 inches (46 centimeters) ~~(18 inches)~~ ^[ML27] in the vertical plane. ~~(A typical metallic shoe-type seal with a pantagraph-type hanger is shown in Figure 1. This sketch is for illustrative purposes only and does not constitute endorsement of any product or company).~~
[depiction in figure 1 is no longer available]

- (d) There shall be no holes or tears in, or openings which allow the emission of organic vapors through the envelope surrounding the annular vapor space enclosed by the roof edge, stored liquid surface, shoe, and seal fabric.
 - (e) Any secondary seal shall allow easy insertion of probes up to 6.4 centimeters (2-1/2 inches) 1 1/2 inches (3.8 centimeters) in width in order to measure gaps in the primary seal. [New to D6 – EPA suggestion to change probe size to be consistent with VCAPCD rule 71.2 and SCAQMD rule 463]
 - (f) Any secondary seal shall extend from the roof to the tank shell and shall not be attached to the primary seal.
- (4) The ~~Oowner or/~~ Ooperator of any tank with a such a system closure device, or proposed to be equipped with such a system, shall, prior to use on installation, demonstrate equivalence to the USEPA, CARB and the APCO ~~APCO~~ as follows:
- (a) By an actual emissions test in a full-size or scale sealed tank facility which accurately collects and measures all hydrocarbon emissions associated with a given closure device, and which accurately simulates other emission variables, such as temperature, barometric pressure and wind. The test facility shall be subject to prior approval by the USEPA, CARB and the APCO ~~APCO~~, or,
 - (b) By a pressure leak test, engineering evaluation or other means, where the USEPA, CARB and the ~~APCO~~ determines that the same is an accurate method of determining equivalence.

~~(G) If any portion of this rule shall be found to be unenforceable, such finding shall have no effect on the enforceability of the remaining portions of the rule, which shall continue to be in full force and effect. [New to D8 – Severability section added to section [A], making this section duplicative of that]~~

(H) Compliance Verification Test Methods*

- (1) When more than one test method is specified for testing, a violation determined by any one of these test methods shall constitute a violation of the rule.

- (a) ASTM METHOD D-323-06: Reid vapor pressure shall be determined in accordance with American Society of Testing and Materials D323-06, Standard Test Method for Vapor Pressure of Petroleum Products (Reid Method).
- (b) ASTM METHOD D-2879-97 (2002)(e1): True vapor pressure shall be determined in accordance with American Society of Testing and Materials D2879-97(2002)(e1), Standard Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope.
- (c) EPA METHODS 2A OR 2B: The gas flow rate shall be determined in accordance with EPA Method 2A, Direct Measurement of Gas Volume Through Pipes and Small Ducts; or EPA Method 2B, Determination of Exhaust Gas volume flow rate From Gasoline Vapor Incinerators, as applicable.
- (d) EPA METHOD 18: Exempt compounds shall be determined in accordance with EPA Method 18, Measurement of Gaseous Organic Compound Emissions by Gas Chromatography.
- (e) EPA METHOD 21: The gas tight condition shall be determined in accordance with EPA Method 21, Determination of Volatile Organic Compound Leaks, using a portable analyzer calibrated with methane gas.
- (f) EPA METHODS 25, 25A OR 25B: VOC emissions shall be determined in accordance with EPA Method 25 – Gaseous Nonmethane Organic Emission, or 25A - Gaseous Organic Concentration, Flame Ionization; or EPA Method 25B - Gaseous Organic Concentration, Infrared Analyzer, as applicable. *[New to D10 – updated to add 25 as a test method and correct the double description of 25A]*
- (g) CARB TEST PROCEDURE TP-203.1: The terminal vapor recovery system efficiency shall be determined in accordance with CARB Vapor Recovery Test Procedure TP-203.1, Determination of Emission Factor of Vapor Recovery Systems of Terminals.
- (2) Other test methods demonstrated to provide results that are acceptable for determining Reid or true vapor pressure for purposes of demonstrating compliance with this rule, after review and approval in writing by the District, the CARB, and the USEPA, may also be used. *[New to D7 - language adapted from Yolo-Solano AQMD Rule 2.21 Organic Liquid Storage and Transfer (09/14/16) based on discussions with EPA]*

~~Vapor Pressure shall be determined in accordance with ASTM Method D 323-82, or the unmodified Reid Method and the true vapor pressure in psi absolute of stored liquid shall be determined by using the nomographs contained in American~~

~~Petroleum Institute Bulletin 2517 for conversion of Reid vapor pressure to true vapor pressure.~~

- ~~(2) Vapor Tightness (Fugitive Vapor Leaks) for all equipment described in Section (C) shall be determined by EPA Method 21—Determination of Volatile Organic Compounds Leaks.~~
- ~~(3) Vapor Tightness for delivery vessels shall be determined by the EPA Method entitled Control of Organic Compound Leaks from Gasoline Tank Trucks and Vapor Collection Systems (method specified in the CTG-EPA-450/2-78-051), or the CARB Method entitled, "Certification and Test Procedures for Vapor Recovery Systems of Gasoline Delivery Tanks".~~
- ~~(4) Vapor Tightness for bulk plants shall be determined by CARB Method 202, "Certification of Vapor Recovery Systems—Bulk Plants".~~
- ~~(5) Vapor Tightness terminals shall be determined by CARB Method 203, "Certification of Vapor Recovery Systems—Gasoline Terminals".~~
- ~~(6) Vapor Tightness for service stations shall be determined by the CARB Methods in "Test Procedures for Determining the Efficiency of Gasoline Vapor Recovery Systems at Service Stations".~~

~~* A violation determined by any one of these test methods shall constitute a violation of the rule.~~

MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT
RULE 463 - ADDENDUM

STORAGE TEMPERATURES vs. ~~ACTUAL~~TRUE VAPOR PRESSURE
(gravity/initial boiling points referenced)

	Reference Property A - API B - IBP, °F		Temperature, °F Not to Exceed Vapor Pressure	
<u>Organic Liquids</u>	<u>A</u>	<u>B</u>	<u>0.5 pisa</u>	<u>1.5 pisa</u>
Crude Oils	12	---	---	---
	13	---	120	180
	14	---	85	145
	16	---	60	107
	18	---	55	93
	20	---	52	84
	22	---	49	77
	24	---	45	73
	26	---	42	70
	28	---	40	67
	30	---	38	64
<u>Middle Distillates</u>				
Kerosene	42.5	350	195	250
Diesel	36.4	372	230	290
Gas Oil	26.2	390	249	310
Stove Oil	23	421	275	340
<u>Jet Fuels</u>				
JP-1	43.1	330	165	230
JP-3	54.7	110	---	25
JP-4	51.5	150	20	68
JP-5	39.6	355	205	260
JP-7	44-50	360	205	260

	Reference Property A - API B - IBP, °F		Temperature, °F <u>Not to Exceed Vapor Pressure</u>	
<u>Fuel Oil</u>				
# 1	42.5	350	195	250
# 2	36.4	372	230	290
# 3	26.2	390	249	310
# 4	23.0	421	275	340
# 5	19.9	560	380	465
# 6	16.2	625	450	---
<u>Asphalts</u>				
60-100 pen.	---	---	490	550
120-150 pen.	---	---	450	500
200-300 pen.	---	---	360	420
Acetone	47.0	133	---	35
Acrylonitrile	41.8	173	30	60
Benzene	27.7	176	35	70
Cyclohexane	49.7	177	35	70
Ethylacetate	23.6	171	35	70
Ethyl Alcohol	47.0	173	45	83
Isopropyl Alcohol	47.0	181	45	87
Methyl Alcohol	47.0	148	---	50
Mehylethyl Ketone	44.3	175	30	70
Toluene	30.0	231	73	115
Vinyl Acetate	19.6	163	---	60
Carbon Disulfide	10.6	116	---	10
Carbon Tetra-Chloride	13.4	170	30	60
Chloroform	12.5	142	---	40

	Reference Property		Temperature, °F	
	A - API	B - IBP, °F	<u>Not to Exceed Vapor Pressure</u>	
1,2-Dichloro-ethane	10.5	180	35	77
Methylene Chloride	11.1	104	---	70
1,1,1-Trichloro-ethane	11.2	165	60	100
Trichloroethylene	12.3	188	50	91

See SIP Table at <http://www.mdaqmd.ca.gov/Modules/ShowDocument.aspx?documentid=45>

[SIP: Approved 5/3/95, 60 FR 21702, 40 CFR 52.220(e)(191)(i)(C); Approved 6/9/82, 47 FR 25013, 40 CFR 52.220(e)(xii)(B); Approved _____, _____, 40 CFR 52.220(e)(42)(xiii)(A)]

Appendix “B”

Public Notice Documents

1. Draft Proof of Publication – Daily Press, September 22, 2017
2. Draft Proof of Publication – Riverside Press Enterprise, September 22, 2017

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PROOF OF PUBLICATION

(2015.5 C.C.P.)

**STATE OF CALIFORNIA,
County of San Bernardino**

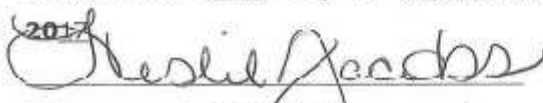
I am a citizen of the United States and a resident of the County aforesaid; I am over the age of eighteen years, and not a party to or interested in the above entitled matter. I am the principal clerk of the publisher of the DAILY PRESS, a newspaper of general circulation, published in the City of Victorville, County of San Bernardino, and which newspaper has been adjudicated a newspaper of general circulation by the Superior Court of the County of San Bernardino, State of California, under the date of November 21, 1938, Case number 43096, that the notice, of which the annexed is a printed copy (set in type not smaller than nonpareil), has been published in each regular and entire issue of said newspaper and not in any supplement thereof on the following dates, to-wit:

September 22

All in the year 2017.

I certify (or declare) under penalty of perjury that the foregoing is true and correct.

Dated this: 22nd day of September,

2017

Signature
Leslie Jacobs

**This space is the County Clerk's Filing
Stamp**

**FILED
MOJAVE DESERT AQMD
CLERK OF THE BOARD**

SEP 27 2017

BY

Proof of Publication of NOTICE OF HEARING

NOTICE OF HEARING

NOTICE IS HEREBY GIVEN that the Governing Board of the Mojave Desert Air Quality Management District (MDAQMD) will conduct a public hearing on October 23, 2017 at 10:00 A.M. to consider the proposed amendment of Rule 102 - Definition of Terms, Rule 461 - Catalytic Converter and Purifiers, Rule 462 - Organic Liquid Loading, Rule 463 - Storage of Organic Liquids, Rule 1115 - Metal Parts & Products Coating Operations, and Rule 1160 - Internal Combustion Engines.

SAYD HEARING will be conducted in the Governing Board Chamber located at the MDAQMD offices 14304 Park Avenue, Victorville, CA 92392-2310 when all interested persons may be present and be heard. Copies of the proposed rule and the associated Staff Reports are on file and may be obtained from the Executive Office Manager at the MDAQMD Offices. Written comments may be submitted to Brad Perrier, APPEL at the above office address. Written comments should be received no later than October 20, 2017 to be considered. If you have any questions regarding Rule 102 or Rule 1115 you may contact Tracy Walters at (760) 245-1651 ext. 6122 for further information. If you have any questions regarding Rules 461, 462,

or 463 you may contact Michelle Zumwalt at extension 3754 for further information. If you have any questions regarding Rule 1160 you may contact Shes Haggard at extension 1844 for further information. Traducción esta disponible por solicitud.

The proposed amendment of Rule 102 - Definition of Terms is necessary to shift common definitions used in the MDAQMD rulebook to Rule 102, and to update them for consistency and clarity.

Rules 461, 462, 463, 1115 and 1160 are proposed for amendment to satisfy 40 U.S.C. § 7511a (Federal Clean Air Act (FCAA) 1182) which requires that ozone non-attainment areas implement Reasonably Available Control Technology (RACT) for sources that are subject to Control Techniques Guidelines (CTG) and for major sources of ozone precursors.

Pursuant to the California Environmental Quality Act (CEQA) the MDAQMD has determined that a Categorical Exemption (Class 3 - 14 Cal. Code Reg. § 15300) applies and has prepared a Notice of Exemption for this action.

Published in the
Daily Press
September 24, 2017
(p.92)

NOTICE OF HEARING

NOTICE IS HEREBY GIVEN that the Governing Board of the Mojave Desert Air Quality Management District (MDAQMD) will conduct a public hearing on October 23, 2017 at 10:00 A.M. to consider the proposed amendment of Rule 102 – *Definition of Terms*, Rule 461 – *Gasoline Transfer and Dispensing*, Rule 462 – *Organic Liquid Loading*, Rule 463 – *Storage of Organic Liquids*, Rule 1115 – *Metal Parts & Products Coating Operations*, and Rule 1160 – *Internal Combustion Engines*.

SAID HEARING will be conducted in the Governing Board Chambers located at the MDAQMD offices 14306 Park Avenue, Victorville, CA 92392-2310 where all interested persons may be present and be heard. Copies of the proposed rules and the associated Staff Reports are on file and may be obtained from the Executive Office Manager at the MDAQMD Offices. Written comments may be submitted to Brad Poiriez, APCO at the above office address. Written comments should be received no later than October 20, 2017 to be considered. If you have any questions regarding Rule 102 or Rule 1115 you may contact Tracy Walters at (760) 245-1661 extension 6122 for further information. If you have any questions regarding Rules 461, 462, or 463 you may contact Michelle Zumwalt at extension 5756 for further information. If you have any questions regarding Rule 1160 you may contact Sheri Haggard at extension 1864 for further information. Traducción esta disponible por solicitud.

The proposed amendment of Rule 102 – *Definition of Terms* is necessary to shift common definitions used in the MDAQMD rulebook to Rule 102, and to update them for consistency and clarity.

Rules 461, 462, 463, 1115 and 1160 are proposed for amendment to satisfy 42 U.S.C. §§7511a (Federal Clean Air Act (FCAA) §182) which requires that ozone non-attainment areas implement Reasonably Available Control Technology (RACT) for sources that are subject to Control Techniques Guidelines (CTG) and for major sources of ozone precursors.

Pursuant to the California Environmental Quality Act (CEQA) the MDAQMD has determined that a Categorical Exemption (Class 8 – 14 Cal. Code Reg §15308) applies and has prepared a *Notice of Exemption* for this action.

THE PRESS-ENTERPRISE

1825 Chicago Ave, Suite 100
Riverside, CA 92507
951-684-1200
951-368-9018 FAX

PROOF OF PUBLICATION
(2010, 2015.5 C.C.P.)

Publication(s): The Press-Enterprise

PROOF OF PUBLICATION OF

Ad Desc: /

I am a citizen of the United States. I am over the age of eighteen years and not a party to or interested in the above-entitled matter. I am an authorized representative of THE PRESS-ENTERPRISE, a newspaper in general circulation, printed and published daily in the County of Riverside, and which newspaper has been adjudicated a newspaper of general circulation by the Superior Court of the County of Riverside, State of California, under date of April 25, 1962, Case Number 54446, under date of March 20, 1967, Case Number 68873, under date of August 26, 1966, Case Number 287864, and under date of September 16, 2013, Case Number RIC 1309013; that the notice, of which the annexed is a printed copy has been published in said newspaper in accordance with the instructions of the person(s) requesting publication, and not in any supplement thereof on the following dates, to wit:

09/22/2017

I certify (or declare) under penalty of perjury that the foregoing is true and correct.

Date: September 22, 2017
At: Riverside, California

Legal Advertising Representative, The Press-Enterprise

MOJAVE DESERT AQMD
14305 PARK AVE
ATTN: D. HERNANDEZ
VICTORVILLE, CA 92382

Ad Number: 0011012355-01

P.O. Number:

Ac Copy

NOTICE OF HEARING

NOTICE IS HEREBY GIVEN that the Governing Board of the Mojave Desert Air Quality Management District (MDAQMD) will conduct a public hearing on October 20, 2017 at 10:00 A.M. to consider the proposed amendment of Rule 102 - Definition of Terms, Rule 461 - Gasoline Fueler and Dispensing, Rule 462 - Organic Liquid Loading, Rule 463 - Storage of Organic Liquids, Rule 1115 - Metal Parts & Products Loading Operations, and Rule 1160 - Internal Combustion Engines.

SAID HEARING will be conducted in the Governing Board Chambers located at the MDAQMD offices, 14305 Park Avenue, Victorville, CA 92382-3310 where all interested persons may be present and be heard. Copies of the proposed rules and the associated Staff Reports are on file and may be obtained from the Executive Office Manager of the MDAQMD offices. Written comments may be submitted to Brad Pollock, APCO at the above office address. Written comments should be received no later than October 20, 2017 to be considered. If you have any question regarding Rule 102 or Rule 1115 you may contact Tracy Walters at (951) 368-1841 extension 5722 for further information. If you have any questions regarding Rules 461, 462, or 463 you may contact Michelle Zumwalt at extension 5754 for further information. If you have any questions regarding Rule 1160 you may contact Sheri Haggard at extension 1864 for further information. Reduction costs disposable per solicited.

The proposed amendment of Rule 102 - Definition of Terms is necessary to shift common definitions used in the MDAQMD rulebook to Rule 102, and to update them for consistency and clarity.

Rules 461, 462, 463, 1115 and 1160 are proposed for amendment to reflect B.U.S.C. 65211a (Federal Clean Air Act (CAA) 912) which requires that ozone non-attainment areas implement Reasonably Available Control Technology (RACT) for sources that are subject to Control Techniques Guidelines (CTG) and for major sources of ozone precursors.

Pursuant to the California Environmental Quality Act (CEQA) the MDAQMD has determined that a Categorical Exemption (Class 3 - 14 Cal. Code Regs 15300) applies and has prepared a Notice of Exemption for this action.

W2

FILED
MOJAVE DESERT AQMD
CLERK OF THE BOARD

SEP 27 2017

BY: 

NOTICE OF HEARING

NOTICE IS HEREBY GIVEN that the Governing Board of the Mojave Desert Air Quality Management District (MDAQMD) will conduct a public hearing on October 23, 2017 at 10:00 A.M. to consider the proposed amendment of Rule 102 – *Definition of Terms*, Rule 461 – *Gasoline Transfer and Dispensing*, Rule 462 – *Organic Liquid Loading*, Rule 463 – *Storage of Organic Liquids*, Rule 1115 – *Metal Parts & Products Coating Operations*, and Rule 1160 – *Internal Combustion Engines*.

SAID HEARING will be conducted in the Governing Board Chambers located at the MDAQMD offices 14306 Park Avenue, Victorville, CA 92392-2310 where all interested persons may be present and be heard. Copies of the proposed rules and the associated Staff Reports are on file and may be obtained from the Executive Office Manager at the MDAQMD Offices. Written comments may be submitted to Brad Poiriez, APCO at the above office address. Written comments should be received no later than October 20, 2017 to be considered. If you have any questions regarding Rule 102 or Rule 1115 you may contact Tracy Walters at (760) 245-1661 extension 6122 for further information. If you have any questions regarding Rules 461, 462, or 463 you may contact Michelle Zumwalt at extension 5756 for further information. If you have any questions regarding Rule 1160 you may contact Sheri Haggard at extension 1864 for further information. Traducción esta disponible por solicitud.

The proposed amendment of Rule 102 – *Definition of Terms* is necessary to shift common definitions used in the MDAQMD rulebook to Rule 102, and to update them for consistency and clarity.

Rules 461, 462, 463, 1115 and 1160 are proposed for amendment to satisfy 42 U.S.C. §§7511a (Federal Clean Air Act (FCAA) §182) which requires that ozone non-attainment areas implement Reasonably Available Control Technology (RACT) for sources that are subject to Control Techniques Guidelines (CTG) and for major sources of ozone precursors.

Pursuant to the California Environmental Quality Act (CEQA) the MDAQMD has determined that a Categorical Exemption (Class 8 – 14 Cal. Code Reg §15308) applies and has prepared a *Notice of Exemption* for this action.

Appendix “C”

Public Comments and Responses

1. Kinder Morgan – Comment submittal, August 31, 2017
 - a. District Response contained within attached email, September 7, 2017
2. Metropolitan Water District – Comment submittal, September 7, 2017
 - a. District Response contained within attached email, September 12, 2017
3. Kinder Morgan – Comment submittal, September 19, 2017
 - a. District Response contained within attached email, September 25, 2017
4. Metropolitan Water District – Comment submittal, September 19, 2017
 - a. District Response contained within attached email, September 25, 2017
5. USEPA – Comment submittal, October 18, 2017
 - a. District Response contained in draft rule revisions emailed November 7, 2017, itemized response contained here in Staff Report D6.

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**1.) Comment Submission by:
Kinder Morgan**

Michelle Zumwalt

From: Michelle Zumwalt
Sent: Thursday, September 7, 2017 11:10 AM
To: 'Picado, Juziel'
Cc: Alan De Salvio
Subject: RE: Amendments to Rules 461, 462 and 463

Also, your interpretation of the breakdown requirements in section 6 are correct.

Thanks,
Michelle

From: Michelle Zumwalt
Sent: Thursday, September 7, 2017 11:07 AM
To: 'Picado, Juziel'
Cc: Alan De Salvio
Subject: RE: Amendments to Rules 461, 462 and 463

Please see responses below...

Please feel free to reach out to me if you have any questions.

Thanks,

Michelle Zumwalt
Air Quality Specialist

Mojave Desert AQMD / Antelope Valley AQMD
14306 Park Avenue • Victorville, CA 92392
Phone: (760) 245-1661 x5756 • Fax: (760) 245-2022
www.mdaqmd.ca.gov • www.avaqmd.ca.gov

From: Picado, Juziel [mailto:Juziel_Picado@kindermorgan.com]
Sent: Thursday, August 31, 2017 9:57 AM
To: Michelle Zumwalt
Subject: RE: Amendments to Rules 461, 462 and 463

Hi Michelle,

I have a few comments/questions regarding the proposed amendments to Rules 461, 462 and 463. They are as follows:

Rule 461

- 1) It is our understanding that this rule is not applicable to bulk terminals. Is this correct?
 - a. 461 is not applicable to bulk terminals.

Rule 462

- 2) Page 1, Sections (A)(1)(a) and (A)(2)(b)
 - a. the above mentioned sections do not apply to gas stations.

Is loading into motor vehicle fuel tanks gasoline dispensing, i.e. like what is done at gasoline stations? If so, are gasoline stations subject to this rule since it mentioned retail and non-retail service stations by that particular terminology? If gasoline stations are not intended for this rule, we suggest removing any reference to them from this rule.

- b. Gas Stations are however subject Section (D) Additional Requirements of this rule, so they cannot be removed.

3) Page 4, Section (C)(1)(e)

This section mentions "facility vapor leaks, or liquid leaks". Could please clarify if what is meant here to be more clear are "fugitive vapor leaks" and "fugitive liquid leaks", as they are defined in Rule 102? Adding the word "fugitive" might be more indicative that what this section of the rule is trying to prevent are fugitive leaks, whether in vapor or liquid form. Please see item 5 below since it is related.

- a. Great suggestion, we will incorporate additional language for clarity into the rule.

4) Pages 4-5, Section (C)(2)(a)(iv)

Suggesting to add "excluding floating roof tanks" to clarify since P/V vents are the control for fixed roof tanks, but not for floating roof tanks.

- a. Great suggestion, we will incorporate additional language for clarity into the rule.

5) Page 6, Section (D)(4)(a)

There is a limit of 10,000 ppm mentioned in this rule. Is this limit of 10,000 ppm different because it only applies when switch loading only and has nothing to do with the vapors emitted being considered "fugitive vapor leaks" as defined in Rule 102? If the vapors are considered "fugitive", then the limit is 3,000 ppm, as per Rule 102. In other words, why the two limits, one for 10,000 ppm and the other for 3,000 ppm for fugitive vapor leaks?

- a. Per RACT, 10,000 ppm is an applicability threshold.

Rule 463

6) Page 6, Section (C)(3)(e)

Is there any reporting requirement for the tanks found in non-compliance under this section, i.e. report the non-compliance? Also, after this rule is adopted, there will be no need to call tank breakdowns which can be brought back to compliance within 72 hours. Conversely, if it will take longer than 72 hours to bring the tank back into compliance then it's considered a breakdown and a breakdown event would have to be reported to the MDAQMD. Is this interpretation correct?

- a. Yes, any tanks found to be non-compliant shall be reported/recorded under section (D)(3) of this rule, including the actions to bring it back into compliance.

7) Please clarify if liquids with a true vapor pressure of less than 0.5 psia (e.g. diesel, jet fuel, biodiesel, etc.) are not subject to Rules 462 and 463.

- a. Liquids with a true vapor pressure of less than 0.5 psia are subject to both rules 462, and 463 – please see 462 (D), and 463 (C)(3).

Thank you,

Juziel Picado
Specialist – Permitting Compliance

KINDER MORGAN

1100 Town & Country Rd., Suite 700
Orange, CA 92868
Office: (714) 560-4991
Cell: (714) 438-9478
Juziel.Picado@kindermorgan.com

From: Michelle Zumwalt [<mailto:mzumwalt@mdaqmd.ca.gov>]
Sent: Monday, August 21, 2017 2:40 PM
To: Picado, Juziel
Subject: RE: Amendments to Rules 461, 462 and 463

[This email message was received from the Internet and came from outside of Kinder Morgan]

Good Afternoon Mr. Picado –

We hope to adopt at the October Governing Board meeting, which will be held on October 23, 2017.

Please let me know if you have any additional questions or comments.

Thanks,

Michelle Zumwalt
Air Quality Specialist

Mojave Desert AQMD / Antelope Valley AQMD
14306 Park Avenue • Victorville, CA 92392
Phone: (760) 245-1661 x5756 • Fax: (760) 245-2022
www.mdaqmd.ca.gov • www.avaqmd.ca.gov

From: Picado, Juziel [mailto:Juziel_Picado@kindermorgan.com]
Sent: Monday, August 21, 2017 2:32 PM
To: Michelle Zumwalt
Subject: Amendments to Rules 461, 462 and 463

Hi Michelle,

Can you please send me electronic copies of the proposed amendments to Rules 461, 462 and 463? Also, what is the timeline for implementation of these rules?

Thank you,

Juziel Picado
Specialist – Permitting Compliance

KINDER MORGAN

1100 Town & Country Rd., Suite 700
Orange, CA 92868

Office: (714) 560-4991
Cell: (714) 438-9478
Juziel_Picado@kindermorgan.com

2.) Comment Submission by: Metropolitan Water District

Michelle Zumwalt

From: Michelle Zumwalt
Sent: Tuesday, September 12, 2017 11:25 AM
To: 'Kaufman,Carol Y'
Cc: Fang,Anthony C; Cotter,Sean T; Bell,Janet J; Gabelich,Christopher J; Alan De Salvio
Subject: RE: MWD Comments re: MDAQMD Rule Amendments 461, 462 and 463

Good Morning Ms. Kaufman –

It was a pleasure to speak with you as well. I appreciate your taking to time to review and submit comments, please see my responses below. A staff report and updated draft rules will be circulated in the near future.

Michelle Zumwalt
Air Quality Specialist

Mojave Desert AQMD / Antelope Valley AQMD
14306 Park Avenue • Victorville, CA 92392
Phone: (760) 245-1661 x5756 • Fax: (760) 245-2022
www.mdaqmd.ca.gov • www.avaqmd.ca.gov

From: Kaufman,Carol Y [mailto:cykaufman@mwdh2o.com]
Sent: Thursday, September 7, 2017 6:41 PM
To: Michelle Zumwalt
Cc: Fang,Anthony C; Cotter,Sean T; Bell,Janet J; Gabelich,Christopher J
Subject: MWD Comments re: MDAQMD Rule Amendments 461, 462 and 463

Hi Michelle,

Thanks for the discussion yesterday and for providing the electronic copies of the draft rule amendments. To follow-up on our conversation, Metropolitan's comments to date on the proposed amendments are as follows:

- Proposed Amended Rule 461. Gasoline Transfer and Dispensing

“Altered Gasoline Transfer and Dispensing Facility” – The draft rule contains multiple references to an “Altered Gasoline Transfer and Dispensing Facility”. We recommend that a definition of the term be included to clarify what type of changes to a system would constitute an alteration that would trigger the specified rule requirements.

➤ District Response –Thank you for your comments, Altered Gasoline Transfer and Dispensing Facility has been added to the definitions in Rule 461.
- Proposed Amended Rule 462. Organic Liquid Loading

Applicability – As currently written, the applicability includes Class “A” or “B” facilities that “...include, but are not limited to, bulk facilities, retail and non-retail service stations or any other facility where organic liquids are stored or transferred.” However, in reading the rule, it appears that the rule is intended to regulate facilities that have bulk loading operations, and not small non-retail gasoline dispensing facilities that are already regulated in MDAQMD Rule 461 per the CARB Vapor Recovery requirements. We recommend that the applicability be reviewed.

and clarified if the intent is to not regulate these type of facilities that are already regulated as gasoline dispensing facilities under Rule 461. As an example, SCAQMD Rule 462 contains the following applicability definition:

“(6) FACILITY is an organic liquid or gasoline loading rack or set of such racks that load organic liquid or gasoline into tanks, trailers or railroad cars, which are located on one or more contiguous properties within the District, in actual physical contact or separated solely by a public roadway or other public right-of-way, and are owned or operated by the same person or persons under common control.”

- District Response – In the preliminary version of the draft rule, applicable tanks for loading were struck from the Class “A” Facility and Class “B” Facility definitions. Those tanks, “tank truck, trailer or railroad tank car”, have been maintained in the newest draft of the rule. This update maintains that retail and non-retail gasoline dispensing facilities are not subject to Class “A” and Class “B” facility requirements as outlined in Sections (C)(1) and (C)(2) of Rule 462. However Section (D) is subject to the Health and Safety Code Section 41950 – 41974, which cover both Articles 5 – *Gasoline Vapor Control*; and Article 6 – *Gasoline Cargo Tanks*. This makes stationary storage tanks with a capacity of 250 gallons or greater is subject to Section (D) of the rule, which would reasonably include retail and non-retail gasoline dispensing facilities.

The attached electronic copies will be used to continue Metropolitan’s review of the proposed amendments, and we will provide any additional comments in advance of the tentative October adoption.

Please let me or Anthony Fang (afang@mwwdh2o.com, 213-217-6106) know if you have any questions.

Have a great weekend,

Carol Kaufman
Air Quality Program Manager
Metropolitan Water District of Southern California
700 North Alameda Street
Los Angeles, CA 90012
213-217-6207
FAX 213-217-6700
Cell 310-850-6105



From: Michelle Zumwalt [<mailto:mzumwalt@mdaqmd.ca.gov>]
Sent: Wednesday, September 06, 2017 2:20 PM
To: Kaufman,Carol Y
Subject: FW: MDAQMD Rule Amendments 461, 462 and 463

Good Afternoon Carol –

Thank you for reaching out to me. Here are the electronic copies of the preliminary drafts that I am working on. We are planning to go to the board with them in October (10/23/2017). I welcome any additional comments or suggestions that you may have.

Michelle Zumwalt
Air Quality Specialist

Mojave Desert AQMD / Antelope Valley AQMD
14306 Park Avenue • Victorville, CA 92392
Phone: (760) 245-1661 x5756 • Fax: (760) 245-2022
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3.) Comment Submission by: Kinder Morgan

Michelle Zumwalt

From: Michelle Zumwalt
Sent: Monday, September 25, 2017 2:39 PM
To: 'Picado, Juziel'
Cc: Wang, Yijin; Alan De Salvio
Subject: RE: Amendments to Rules 461, 462 and 463

Good Afternoon Mr. Picado –

Please see the District response below. Thank you for helping to clarify this section of the rule.

From: Picado, Juziel [mailto:Juziel_Picado@kindermorgan.com]
Sent: Tuesday, September 19, 2017 6:33 AM
To: Michelle Zumwalt
Cc: Wang, Yijin
Subject: RE: Amendments to Rules 461, 462 and 463

Good Morning Michelle,

I was looking over the second revision of Rule 462 and noticed that section (F)(1)(b)(iv) is not crossed out as it was in the first version. The language in the rule reads “storage and transfer temperatures of the organic liquid”. Could you please clarify what is meant by transfer temperatures? Does this mean we have to record the temperature every time an organic liquid is transferred, i.e. the transfer temperature?

- **District Response:** The struck out language in paragraph (F)(1)(b) currently requires that storage and transfer temperatures be recorded on a daily basis. I will update (F)(1)(b)(iv) to clarify that this record keeping will still be required on a daily basis.

Thanks,

Juziel Picado
Specialist – Permitting Compliance

KINDER MORGAN

1100 Town & Country Rd., Suite 700
Orange, CA 92868
Office: (714) 560-4991
Cell: (714) 438-9478
Juziel_Picado@kindermorgan.com

From: Michelle Zumwalt [mailto:mzumwalt@mdaqmd.ca.gov]
Sent: Thursday, September 07, 2017 11:10 AM
To: Picado, Juziel
Cc: Alan De Salvio
Subject: RE: Amendments to Rules 461, 462 and 463

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4.) Comment Submission by: Metropolitan Water District

Michelle Zumwalt

From: Michelle Zumwalt
Sent: Monday, September 25, 2017 4:40 PM
To: 'Kaufman,Carol Y'
Cc: Fang,Anthony C; Cotter,Sean T; Bell,Janet J; Gabelich,Christopher J; Alan De Salvio
Subject: RE: MWD Additional Comments re: MDAQMD Rule Amendments 461, 462 and 463

Good Evening Carol –

Thank you for taking the time to comment on our proposed rules for adoption. Please see below for comments. An updated staff report with redlined rules will follow shortly.

Michelle Zumwalt
Air Quality Specialist

Mojave Desert AQMD / Antelope Valley AQMD
14306 Park Avenue • Victorville, CA 92392
Phone: (760) 245-1661 x5756 • Fax: (760) 245-2022
www.mdaqmd.ca.gov • www.avaqmd.ca.gov

From: Kaufman,Carol Y [mailto:cykaufman@mwdeh2o.com]
Sent: Tuesday, September 19, 2017 1:59 PM
To: Michelle Zumwalt
Cc: Fang,Anthony C; Cotter,Sean T; Bell,Janet J; Gabelich,Christopher J
Subject: MWD Additional Comments re: MDAQMD Rule Amendments 461, 462 and 463

Hi Ms. Zumwalt,

We appreciate the timely response to our initial comments and for incorporating the recommended definition in Proposed Amended Rule (PAR) 461. Relative to the second comment on PAR 462, Organic Liquid Loading, as we discussed late last week it was made in an attempt to clarify the rule applicability and minimize possible duplication between the organic liquid rules and Rule 461 which is specific for the transfer and dispensing of gasoline (i.e., into any stationary storage tank or mobile fueler or motor vehicle fuel tank).

Along these lines, we ask that the following be considered:

- Proposed Amended Rule 462, Organic Liquid Loading – the Purpose and Applicability should be limited to “facilities that load organic liquids with a vapor pressure of 1.5 psia (77.5 mm Hg) or greater under actual loading conditions into any tank truck, trailer, or railroad tank car.” Loading into a stationary storage tank or a motor vehicle fuel tank is already covered in Rule 461. As such, the regulatory requirements (e.g., pursuant to the Health and Safety Code) for retail and non-retail gasoline transfer and dispensing facilities would then be centralized in Rule 461 and not repeated in Rule 462. This applicability is consistent with the approach of other air districts, such as Antelope Valley AQMD (AVAQMD) and SCAQMD, where their Rules 462 are limited to tank truck, trailer, or railroad tank car.
 - **District Response:** The applicable vapor pressure could vary based on type of organic liquid stored at a facility. Organic Liquid is defined in Rule 102 as, “Any compound of carbon, including organic materials, organic solvents and gasoline, which is in a liquid phase at ambient or storage conditions.” Class A

Facility and Class B Facility are defined in 462 as having True Vapor Pressure under actual storage conditions as 77.5 mm (1.5 psia) or greater.

Section D of this rule is subject to the Health and Safety Code Section 41950 – 41974, which cover both Articles 5 – Gasoline Vapor Control; and Article 6 - Gasoline Cargo Tanks. This makes stationary storage tanks with a capacity of 250 gallons or greater is subject to Section (D) of the rule, which would reasonably include retail and non-retail gasoline dispensing facilities.

- Proposed Amended Rule 463, Storage of Organic Liquids – since this rule applies to above ground gasoline storage tanks of capacity of at least 250 gallons, we recommend that the following phrase be added to (C) Requirements, (1)(c)(ii) – “All piping, valves and fittings shall be constructed and maintained in a gas tight condition, such that no organic vapor or gas leaks are detectable, *in accordance with requirements of other District rules for such equipment*. This wording is also found in AVAQMD and SCAQMD Rules 463, and appears to be a reference to the Rule 461 requirements for gasoline transfer and dispensing facilities.
 - **District Response:** Language has been clarified in section (C)(1)(c)(ii) to reference the defined terms (capitalized) in our Definitions Rule 102, “All piping, valves and fittings shall be constructed and maintained both *Liquid Tight* and *Vapor Tight*, such that no organic vapor or gas leaks are detectable.”

Thank you again for your consideration of our clarification comments. Please let me or Anthony Fang (afang@mw2o.com, 213-217-6106) know if you would like to discuss further.

Take care,

Carol

From: Michelle Zumwalt [<mailto:mzumwalt@mdaqmd.ca.gov>]
Sent: Tuesday, September 12, 2017 11:25 AM
To: Kaufman,Carol Y
Cc: Fang,Anthony C; Cotter,Sean T; Bell,Janet J; Gabelich,Christopher J; Alan De Salvio
Subject: RE: MWD Comments re: MDAQMD Rule Amendments 461, 462 and 463

Good Morning Ms. Kaufman –

It was a pleasure to speak with you as well. I appreciate your taking to time to review and submit comments, please see my responses below. A staff report and updated draft rules will be circulated in the near future.

Michelle Zumwalt
Air Quality Specialist

Mojave Desert AQMD / Antelope Valley AQMD
14306 Park Avenue • Victorville, CA 92392
Phone: (760) 245-1661 x5756 • Fax: (760) 245-2022
www.mdaqmd.ca.gov • www.avaqmd.ca.gov

From: Kaufman,Carol Y [<mailto:cykaufman@mw2o.com>]
Sent: Thursday, September 7, 2017 6:41 PM

5.) Comment Submission by: USEPA

10/18/2017

Hi Michelle,

We are providing comments below based on our preliminary review of draft Mojave Desert Rules 461 (dated D3: 9/12/17), 462 (dated D3: 9/13/17), and 463 (dated D3: 9/12/17).

Please feel free to contact me at (415) 972-3004.

Sincerely,

Rebecca Newhouse

Mojave Desert draft Rule 461, Gasoline Transfer and Dispensing (Dated D3: 9/12/17)

We are providing the following comments to help clarify and improve Rule 461.

1. Under (C)(1), the section heading was amended to only apply to gasoline transfers *into* stationary storage tanks or mobile fuelers (i.e., Phase I transfers), however, the requirements still reference gasoline transfer “into or from any tank...”. Please make necessary changes to ensure consistency when referring to Phase I transfers.
2. Please update the link in (C)(3)(a). The link provided is for a VRED list not updated since 2006. Consider this URL <https://www.arb.ca.gov/vapor/vred/vred.htm> or removing the URL from the rule.
3. We recommend removing the reference to “delivery vessels” in (C)(1)(c) to clarify that all non-exempted stationary storage tanks during Phase I transfers are required to be equipped with CARB-certified vapor recovery systems.
4. Please delete the incorrect reference to section (E) in (E)(1) and replace with a reference to section (G).
5. We recommend specifying in Section (G) that, when more than one test method is specified for determining compliance, a violation determined by any of the methods constitutes a violation of the rule.
6. The revised rule adds references to mobile fuelers, in addition to stationary storage tanks, but does not specify vapor recovery requirements for mobile fuelers in Section (C)(1)(c). For clarity and consistency, we recommend including in Section (C)(1)(c) a reference to mobile fueler tanks, as well as storage tanks, to ensure they are equipped with a CARB certified vapor recovery system having a minimum volumetric efficiency of 95% (for example, please see SCAQMD Rule 461 section (c)(1)(C), and Sacramento Metro AQMD Rule 448 section 301.3).
7. The new text in (C)(1)(l) through (p) appears to be in the wrong section and should probably be in (C)(3) Additional Requirements, instead of (C)(1) Gasoline Transfers into Stationary Storage

Tanks and Mobile Fuelers (Phase I). See, for example, AVAQMD Rule 461 sections (C)(3)(g)-(k) and SCAQMD Rule 461 sections (c)(3)(J), (K), (L), and (N).

8. The references in section (E)(4) to subsection (F)(3), (F)(4), and (F)(5) appear to be incorrect. Please review whether the references should instead be (E)(3)(c)-(e) (for example, please see AVAQMD Rule 461 section (C)(5)(d)).
9. Please consider updating the vapor recovery system efficiencies for Phase I systems to ensure consistency with CARB CP-201. For example, this rule requires in Section(C)(1)(c) that the tank be equipped with a CARB-certified vapor recovery system that achieves a 95% efficiency, but this is inconsistent with CARB CP 201, which requires 98% efficiency for Phase I gasoline transfers to underground tanks (for example, see Sacramento Metro AQMD Rule 448 section 301.1 and SCAQMD Rule 461 (c)(1)(A)).

Mojave Desert AQMD draft Rule 462: Organic Liquid Loading (dated 03: 9/13/17)

We recommend the following change to address a potential approvability issue:

1. Please specify a vapor recovery efficiency requirement or emissions limit for Class "B" facilities. For example, please see Antelope Valley AQMD Rule 462 section (d)(2)(B), SCAQMD Rule 462 section (d)(2)(B), and Ventura County APCD Rule 70 section (C)(1), which require 90% vapor recovery efficiency for transfers at gasoline bulk plants, and San Joaquin Valley Air Pollution Control District (SJVAPCD) Rule 4624 section 5.2 and Yolo-Solano AQMD Rule 2.21 section 309.1, which both require at least 95% prevention of displaced VOCs from bulk gasoline plant transfers, and see Sacramento Metropolitan AQMD Rule 447 section 302, which sets an emissions limit of 0.6 lbs VOC/1000 gallons organic liquid transferred at bulk plants and Placer County APCD Rule 215 section 301.3, with an emissions limit of 0.6 lbs VOC/1000 gallons of gasoline transferred at bulk plants.

We believe the following comments will help clarify and improve Rule 462 and are not likely approvability issues.

2. In section (C)(1)(a)(ii), please specify the requirements that must be met for district approval of a vapor recovery and/or disposal system.
3. Please revise section (F)(1)(a) to require records be maintained for at least 5 years for Title V sources and sources subject to MACT standards.
4. It is not clear why the test method for determining vapor recovery efficiency for service stations is included in this rule since the rule does not cover vapor recovery efficiencies for gasoline service stations. Please verify, and make changes if needed, that test method (G)(1)(d) is necessary to ensure compliance with rule requirements.
5. Please consider including a requirement that the backpressure in the vapor recovery system for loading at Class "B" facilities not exceed 18 inches of water column pressure (for example, please see AVAQMD Rule 462 (d)(2)(C)).

6. Please consider including a requirement that all vapor recovery and/or disposal systems at Class A facilities be equipped with a continuous monitoring system (CMS) that is installed, operated and maintained per the manufacturer's specifications and is approved by the Executive Officer or designee (for example, please see Antelope Valley AQMD Rule 462 (d)(1)(B)).
7. Please consider requiring semi-annual or annual leak inspections with a portable hydrocarbon analyzer of the vapor collection system, the vapor disposal system, and each loading rack handling organic liquids, if the owner or operator chooses to comply with the monthly inspection schedule using sight, sound, and smell (D)(5)(a)(i)).

Mojave Desert draft Rule 463, Storage of Organic Liquids (dated 03: 9/12/17)

We recommend the following changes to address potential approvability issues:

1. Please include a test method appropriate to determine compliance with (C)(1)(c) and (C)(1)(d), such as EPA Method 25 or 25A. For example, please see SCAQMD Rule 463 (h)(1) and Ventura County APCD rule 71.2 (j)(2).
2. The Rule contains several potential approvability issues with regard to the use of Director's discretion. Specifically, see (C)(1)(a)(iv), (F)(3)(b), (F)(4), and (D)(1).
3. We agree with the assessment in your RACT SIP supplemental analysis dated February 25, 2014 that Rule 463 has less stringent requirements for tank seal gaps than other similar district rules. We recommend riveted tanks meet the same requirements as welded tanks with a mechanical shoe seal for primary and secondary seal gaps (please see Antelope Valley AQMD Rule 463 section (c)(1)(A) and SCAQMD Rule 463 section (c)(1)(A)).

We believe the following comments will help clarify and improve Rule 463 and are not likely approvability issues.

4. It is not clear why test methods for determining "vapor tightness" for delivery vessels, bulk plants, terminals and service stations are included in this rule. Their inclusion is confusing in part because this rule does not specify requirements for those facilities or vehicles, and also because those methods do not allow for detection in ppm with a hydrocarbon analyzer (which is how MDAQMD Rule 102 defines "vapor tight"). Specifically, CARB CP-201, CP-202, and CP-203 apply to organic liquid transfers. Please consider removing references to test methods (H)(3)-(H)(6) if they are not needed to verify compliance with some requirement of the rule.
5. Please amend section (H)(1) to ensure that True Vapor Pressure and Reid Vapor Pressure are determined using the correct methodology. Specifically, ASTM D-323-82 is used to determine Reid Vapor Pressure, and can be converted to True Vapor Pressure using API Bulletin 2517 (e.g., please see Mojave Desert AQMD Rule 462(G)(1)(c) and SCAQMD Rule 463 (h)(3)).
6. It is not clear what section (F)(4) is referring to when specifying "such a system." We recommend adding clarifying language.

7. We recommend referring to the specific requirements that must be evaluated twice per year for floating roof tank inspections in section (C)(3)(d)(i) (please see SCAQMD Rule 463 section (e)(3)(A), Attachment B and Antelope Valley AQMD Rule 463 section (e)(3)(A), Attachment B).
8. It is not clear why secondary seals in riveted tanks with mechanical shoe primary seals must allow larger probes than welded tanks (e.g. 2.5 inches in (F)(3)(e) instead of 1.5 inch probes for welded tanks measurements of seals in (F)(1)(e)). Please review whether riveted tanks with mechanical shoe primary seals should have the same requirement for probe insertion as welded tanks with mechanical shoe primary seals (i.e., up to 1.5 inches). For example, please see Ventura County APCD Rule 71.2 (E)(4)(c) and SCAQMD Rule 463 (c)(1)(C)(ii).

Response to USEPA Comments submitted on 10/18/2017

Rule 461 – Gasoline Transfer and Dispensing

1. (C)(1) - Removed “from” in the statement “into or from any tank”
2. (C)(3)(a) - Updated VRED URL.
3. (C)(1)(c) - Removed delivery vessels in (C)(1)(c).
4. (E)(1) - Corrected reference.
5. (G) – Added, “When more than one test method is specified, a violation of any one test is a violation of the rule.”
6. (C)(1)(c) - Added (C)(1)(d) calling out mobile fuelers with a 95% efficiency rating.
7. (C)(1)(l) – reviewed section and moved items to (C)(3) and (C)(4)
8. (E)(4) – corrected references
9. (C)(1)(c) – updated efficiencies to 98%.

Rule 462 – Organic Liquid Loading

1. (C)(2)(a)(i) - added a 95% efficiency.
2. (C)(1)(a)(ii) – removed section
3. (F)(1)(a) – added a requirement for records of Title V and MACT sources to maintain records for 5 years.
4. (G)(1)(d) – removed CP-201 “Certification Procedure for Vapor Recovery Systems at Gasoline Dispensing Facilities” from subsection (G) Test Methods for Compliance Verification.
5. (C)(2)(a)(iii) – Added backpressure requirement.
6. CMS – After reviewing RACT Districts, the MDAQMD does not believe that requiring a CMS is RACT. In the case of AVAQMD, CMS requirements were inherited from South Coast which of course is a BACT District.
7. (D)(5)(a)ii(a) – required semi-annual leak inspections conducted with OVA when monthly sight/sound inspections are conducted.

Rule 463 – Organic Liquid Storage

1. (C)(1)(e) – referenced method EPA 25 or 25A.
2. (F)(4)(b) – Added USEPA, CARB and APCO instead of just APCO to satisfy requirement as discussed on call 11/29/2017.
3. Tank Gaps – upon further review of other RACT Districts, the MDAQMD feels that the tank gaps in revision D7 (12/4/2017) are in line with RACT requirements.
4. (H)(1) – Test methods CARB CP-201, CP-202 and CP-203 have been removed from this rule.
5. (H)(1) – The lasted Reid Vapor pressure as supplied by the USEPA is ASTM D-323-06 and has been updated in this rule.
6. (F)(4) – changed “such a system” to “closure system”.

7. (C)(3)(d) Added section to address Floating Roof Tank Inspection Requirements:
subsection (i) states that, “all floating roof tanks subject to this rule shall be inspected twice per year at 4 – 8 month intervals.
8. (F)(3)(e) – Requirements found to be the same as South Coast AQMD.

Appendix “D”
California Environmental Quality Act
Documentation

1. Notice of Exemption – San Bernardino County
2. Notice of Exemption – Riverside County

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Mojave Desert Air Quality Management District

DATE FILED & POSTED

Posted On: 01/29/18

Removed On: 03/13/18

Receipt No: 36-01292018-0514

14306 Park Avenue, Victorville, CA 92392-2310

760.245.1661 • fax 760.245.2699

Visit our web site: <http://www.mdaqmd.ca.gov>

Brad Poiriez, Executive Director

NOTICE OF EXEMPTION

TO: County Clerk
San Bernardino County
385 N. Arrowhead, 2nd Floor
San Bernardino, CA 92415

FROM: Mojave Desert
Air Quality Management District
14306 Park Ave
Victorville, CA 92392-2310

☒ MDAQMD Clerk of the Governing Board

PROJECT TITLE: Amendment of: Rule 461 – Gasoline Transfer and Dispensing, Rule 462 – Organic Liquid Loading, Rule 463 – Storage of Organic Liquids

PROJECT LOCATION – SPECIFIC: San Bernardino County portion of the Mojave Desert Air Basin and Palo Verde Valley portion of Riverside County.

PROJECT LOCATION – COUNTY: San Bernardino and Riverside Counties

DESCRIPTION OF PROJECT: Rule 461, 462 and 463 are proposed for amendment to satisfy 42 U.S.C. §§7511a (Federal Clean Air Act (FCAA) §182) which requires that ozone non-attainment areas implement Reasonably Available Control Technology (RACT) for sources that are subject to Control Techniques Guidelines (CTG) and for major sources of ozone precursors.

NAME OF PUBLIC AGENCY APPROVING PROJECT: Mojave Desert AQMD

NAME OF PERSON OR AGENCY CARRYING OUT PROJECT: Mojave Desert AQMD

EXEMPT STATUS (CHECK ONE)

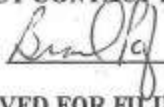
Ministerial (Pub. Res. Code §21080(b)(1); 14 Cal Code Reg. §15268)

Emergency Project (Pub. Res. Code §21080(b)(4); 14 Cal Code Reg. §15269(b))

☒ Categorical Exemption – Class 8 (14 Cal Code Reg. §15308)

REASONS WHY PROJECT IS EXEMPT: The proposed amendments to Rules 461, 462, and 463 are exempt from CEQA review because the amendments will not create any adverse impacts on the environment. Because there is no potential that the amendments might cause the release of additional air contaminants or create any adverse environmental impacts, a Class 8 categorical exemption (14 Cal. Code Reg. §15308) applies.

LEAD AGENCY CONTACT PERSON: Brad Poiriez **PHONE:** (760) 245-1661

SIGNATURE:  **TITLE:** Executive Director **DATE:** 01/22/2018

DATE RECEIVED FOR FILING:

City of Adelanto	Town of Apple Valley	City of Bakers	City of Blythe	City of Hesperia	City of Needles	County of Riverside	County of San Bernardino	City of Twentynine Palms	City of Victorville	Town of Yucca Valley
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Mojave Desert Air

14306 P:

FILED / POSTED

County of Riverside
Peter Aldana
Assessor-County Clerk-Recorder

2-201800005
01/31/2018 01:33 PM Fee: \$ 50.00
Page 1 of 1

Removed: By: Deputy
MAR 07 2018

NOTICE OF EXEMPTION

TO: Clerk/Recorder
Riverside County
3470 12th St.
Riverside, CA 92501

FROM: Mojave Desert
Air Quality Management District
14306 Park Ave
Victorville, CA 92392-2310

☒ MDAQMD Clerk of the Governing Board

PROJECT TITLE: Amendment of: Rule 461 – Gasoline Transfer and Dispensing, Rule 462 – Organic Liquid Loading, Rule 463 – Storage of Organic Liquids

PROJECT LOCATION – SPECIFIC: San Bernardino County portion of the Mojave Desert Air Basin and Palo Verde Valley portion of Riverside County.

PROJECT LOCATION – COUNTY: San Bernardino and Riverside Counties

DESCRIPTION OF PROJECT: Rule 461, 462 and 463 are proposed for amendment to satisfy 42 U.S.C. §§7511a (Federal Clean Air Act (FCAA) §182) which requires that ozone non-attainment areas implement Reasonably Available Control Technology (RACT) for sources that are subject to Control Techniques Guidelines (CTG) and for major sources of ozone precursors.

NAME OF PUBLIC AGENCY APPROVING PROJECT: Mojave Desert AQMD

NAME OF PERSON OR AGENCY CARRYING OUT PROJECT: Mojave Desert AQMD

EXEMPT STATUS (CHECK ONE)

Ministerial (Pub. Res. Code §21080(b)(1); 14 Cal Code Reg. §15268)

Emergency Project (Pub. Res. Code §21080(b)(4); 14 Cal Code Reg. §15269(b))

☒ Categorical Exemption – Class 8 (14 Cal Code Reg. §15308)

REASONS WHY PROJECT IS EXEMPT: The proposed amendments to Rules 461, 462, and 463 are exempt from CEQA review because the amendments will not create any adverse impacts on the environment. Because there is no potential that the amendments might cause the release of additional air contaminants or create any adverse environmental impacts, a Class 8 categorical exemption (14 Cal. Code Reg. §15308) applies.

LEAD AGENCY CONTACT PERSON: Brad Poiriez **PHONE:** (760) 245-1651

SIGNATURE:  **TITLE:** Executive Director **DATE:** 01/22/2018

DATE RECEIVED FOR FILING:

City of Adelanto	City of Apple Valley	City of Bakewell	City of Blythe	City of Hesperia	City of Redlands	County of Fresno	County of San Bernardino	City of Troy	City of Victorville	Town of Palm Valley
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Appendix “E”

Bibliography

The following documents were consulted in the preparation of this staff report.

CTG’S:

Design Criteria for Stage I Vapor Control Systems – Gasoline Stations
(EPA-450/R-75-102 November 1975)

Control of Hydrocarbons from Tank Truck Gasoline Loading Terminals
(EPA-450/2-77-026 October 1977),

Control of Volatile Organic Emissions from Bulk Gasoline Plants
(EPA-450/2-77-035 December 1977),

Control of Volatile Organic Emissions from Bulk Gasoline Plants
(EPA-450/2-77-035 December 1977),

Control of Volatile Organic Emission from Storage of Petroleum Liquids in Fixed-Roof Tanks
(EPA-450/2-77-036 December 1977),

Control of Volatile Organic Emission from Petroleum Liquid Storage in External Floating Roof
Tanks (EPA-450/2-78-047 December 1978) and

Control of Volatile Organic Compound Leaks from Gasoline Tank Trucks and Vapor Collection
Systems (EPA-450/2-78-051 December 1978).

2017 CALIFORNIA HEALTH AND SAFETY CODE:

Part 4 – Non-Vehicular Air Pollution Control

Article 5 Gasoline Vapor Control
§41950 – §41964

Article 6 – Gasoline Cargo Tanks
§41970 - §41974

CALIFORNIA AIR RESOURCES BOARD

Vapor Recovery Executive Orders and Certification Test Procedures:

UST (Underground Storage Tanks) Phase I Vapor Recovery Executive Orders (EO’s):
AST (Aboveground Storage Tanks) Phase I Vapor Recovery Executive Orders:
Phase II EVR (Enhanced Vapor Recovery) Vapor Recovery Executive Orders
AST Phase II Vapor Recovery Executive Orders
Certification and Test Procedures

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AIR DISTRICT RULES:

461 – Gasoline Transfer and Dispensing

AVAQMD Rule 461 – *Gasoline Transfer and Dispensing* (76 FR 5277, 01/31/2001),
SCAQMD Rule 461 – *Gasoline Transfer and Dispensing* (78 FR 21543, 04/11/2013),
YSAQMD Rule 2.22 – *Gasoline Dispensing Facilities* (81 FR 6763, 02/09/2016).

462 – Organic Liquid Loading

AVAQMD Rule 462 – *Organic Liquid Loading* (62 FR 60784, 11/13/1997),
PCAPCD Rule 213 – *Gasoline Transfer into Stationary Storage Containers* (80 FR 7345, 02/10/2015);
SCAQMD Rule 462 – *Organic Liquid Loading* (64 FR 39037, 07/21/1999),
YSAQMD Rule 2.21 – *Organic Liquid Storage and Transfer* (71 FR 63694, 10/31/2006),

463 – Storage of Organic Liquids

AVAQMD Rule 463 – *Storage of Organic Liquids* (61 FR 54941, 10/23/1996);
PCAPCD Rule 212 – *Storage of Organic Liquids* (74 FR 27714, 06/11/2009),
PCAPCD Rule 213 – *Gasoline Transfer into Stationary Storage Containers* (80 FR 7345, 02/10/2015);
SCAQMD Rule 463 – *Storage of Organic Liquids* (78 FR 18854, 11/04/2011);
YSAQMD Rule 2.21 – *Organic Liquid Storage and Transfer* (71 FR 63694, 10/31/2006),

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**MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT
GOVERNING BOARD**

******NOTICE OF CANCELLATION OF REGULAR MEETING****
OF NOVEMBER 27, 2017 & DECEMBER 25, 2017**

NOTICE IS HEREBY GIVEN that the Regular Meeting of the Governing Board of the Mojave Desert Air Quality Management District (District) scheduled for Monday, November 27, 2017 at 10:00 a.m. and Monday, December 25, 2017 has been cancelled.

NOTICE IS ALSO HEREBY GIVEN that the date of the next regular meeting of the Governing Board is scheduled for Monday, January 22, 2018 at 10:00 a.m.

SAID MEETING will be conducted in the Mojave Desert Air Quality Management District Board Chambers, 14306 Park Avenue, Victorville, CA 92392-2310. Interested persons may attend and submit oral and/or written comments/statements at the meeting. It is requested that written comments/statements be submitted to the Victorville location prior to the meeting.

A copy of the Agenda will be duly posted in the main lobby of the District's Headquarter located at 14306 Park Avenue, Victorville, CA for viewing.

**MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT
GOVERNING BOARD**

**DEANNA HERNANDEZ
EXECUTIVE OFFICE MANAGER
PHONE: (760) 245-1661 EXT. 6244**

**MAILED AND POSTED: Thursday, November 9, 2017
DATE**